

2012

See <https://www.spaceweather.com> <https://www.solarmonitor.org>

ftp://ftp.sec.noaa.gov/pub/warehouse/2012/2012_plots/proton/
ftp://ftp.sec.noaa.gov/pub/warehouse/2012/2012_plots/xray/

1 Jan

A Statistical Study of Solar Filament Eruptions That Forms High-Speed Coronal Mass Ejections

Peng [Zou](#), [Chaowei Jiang](#), [Fengsi Wei](#), [Pingbing Zuo](#), [Yi Wang](#)

ApJ 2019

<https://arxiv.org/pdf/1908.08650.pdf>

A New Automatic Tool for CME Detection and Tracking with Machine Learning Techniques

Pengyu [Wang](#), [Yan Zhang](#), [Li Feng](#), [Hanqing Yuan](#), [Yuan Gan](#), [Shuting Li](#), [Lei Lu](#), [Beili Ying](#), [Weiqun Gan](#), [Hui Li](#)

ApJS 2019

<https://arxiv.org/pdf/1907.08798.pdf>

Magnetic reconnection between a solar filament and nearby coronal loops

Leping [Li](#), Jun Zhang, Hardi Peter, Eric Priest, Huadong Chen, Lijia Guo, Feng Chen, Duncan Mackay

Nature Physics 2016

<http://arxiv.org/pdf/1605.03320v1.pdf>

1-2 Jan

STEREO Observations of Interplanetary Coronal Mass Ejections in 2007–2016

L. K. Jian^{1,2}, C. T. Russell^{3,4}, J. G. Luhmann⁵, and A. B. Galvin^{6,7}

2018 ApJ 855 114

<http://sci-hub.tw/http://iopscience.iop.org/0004-637X/855/2/114/>

2 Jan

Evolution of the Radial Size and Expansion of Coronal Mass Ejections Investigated by Combining Remote and In Situ Observations

Bin [Zhuang](#)¹, Noé Lugaz¹, Nada Al-Haddad¹, Réka M. Winslow¹, Camilla Scolini¹, Charles J. Farrugia¹, and Antoinette B. Galvin¹

2023 ApJ 952 7

<https://iopscience.iop.org/article/10.3847/1538-4357/acd847/pdf>

<https://arxiv.org/pdf/2305.14339.pdf>

Воздействие корональных выбросов на удаленные корональные лучи

Б. П. [Филиппов](#)¹, П. Кайшап², А. К. Сривастава², О. В. Марценюк

АЖ, т.91, №8, С. 668-676, 2014

Effects of coronal mass ejections on distant coronal streamers

В. П. [Filippov](#), P. Kayshap, A. K. Srivastava, O. V. Martsenyuk

Astronomy Reports, August 2014, Volume 58, Issue 8, pp 578-586

Astronomicheskii Zhurnal, 2014, Vol. 91, No. 8, pp. 668–676.

<http://arxiv.org/pdf/1408.4324v1.pdf>

2-6 Jan

On the Contribution of Coronal Mass Ejections to the Heliospheric Magnetic Flux Budget on Different Time Scales

Réka M. **Winslow**^{1,1}, Camilla Scolini^{1,2}, Noé Lugaz¹, Nathan A. Schwadron^{1,3}, and Antoinette B. Galvin¹

2023 ApJ 958 41

<https://iopscience.iop.org/article/10.3847/1538-4357/ad02f2/pdf>

Magnetism and the Invisible Man: The mysteries of coronal cavities

Review

Sarah **Gibson**

IAU 300, eds. Schmieder, Malherbe, and Wu, 2014 (2017)

<https://arxiv.org/pdf/1711.09254.pdf>

3 Jan

Is There a Dynamic Difference between Stealthy and Standard Coronal Mass Ejections?

Beili **Ying**¹, Alessandro Bemporad^{2,1}, Li Feng^{1,3}, Nariaki V. Nitta⁴, and Weiqun Gan^{1,3}

2023 ApJ 942 3

<https://iopscience.iop.org/article/10.3847/1538-4357/aca52c/pdf>

Magnetic Flux Ropes in the Solar Corona: Structure and Evolution toward Eruption

Review

Rui Liu

Research in Astron. Astrophys (RAA) 2020

<https://arxiv.org/pdf/2007.11363.pdf> File

Toward Filament Segmentation Using Deep Neural Networks

Azim **Ahmadzadeh**, **Sushant S. Mahajan**, **Dustin J. Kempton**, **Rafal A. Angryk**, **Shihao Ji**

IEEE BigData 2019

<https://arxiv.org/pdf/1912.02743.pdf>

4-6 Jan

FIP Bias Evolution in a Decaying Active Region

D. **Baker**, **D. H. Brooks**, **P. Démoulin**, **S. L. Yardley**, **L. van Driel-Gesztelyi**, **D. M. Long**, **L. M. Green**

2015

<http://arxiv.org/pdf/1501.07397v1.pdf>

5 Jan 2012 - A magnetic **filament** in the sun's northern hemisphere erupted on Jan. 5th at approximately 1300 UT. A fairly **large filament eruption** to the north of region 11392 was recorded as a long duration C2.1 long duration event peaking at 12:38 UTC. **Поглощение на 304 A**. Северный CME.

Morphological evidence for nanoflares heating warm loops in the solar corona

Y. Bi, **J. J. Yang**, **Y. Qin**, **Z. P. Qiang**, **J. C. Hong**, **B. Yang**, **Z. Xu**, **H. Liu**, **K. F. Ji**

A&A 2023

<https://arxiv.org/pdf/2309.10049.pdf>

Height of Shock Formation in the Solar Corona Inferred from Observations of Type II Radio Bursts and Coronal Mass Ejections

N. **Gopalswamy**, H. Xie, P. Makela, S. Yashiro, S. Akiyama, W. Uddin., A. K. Srivastava, N. C. Joshi, R. Chandra, P. K. Manoharan, K. Mahalakshmi, V. C. Dwivedi, R. Jain and A. K. Awasthi, N. V. Nitta, M. J. Aschwanden, D. P. Choudhary

E-print, Jan 2013; Adv. Space Res.

6 Jan

Statistical Study of the Kinetic Features of Supra-arcade Downflows Detected from Multiple Solar Flares

Xiaoyan [Xie](#)^{1,2,3}, Katharine K. Reeves², Chengcai Shen², and Joshua D. Ingram^{4,2}
2022 ApJ 933 15

<https://iopscience.iop.org/article/10.3847/1538-4357/ac695d/pdf>

??? Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David [Webb](#), Nariaki Nitta

[Solar Physics](#) October 2017, 292:142 [File](#)

7 Jan

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia [Alzate](#) and Huw Morgan

2017 ApJ 840 103

<http://sci-hub.cc/10.3847/1538-4357/aa6caa>

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

11 Jan – 04:56: C3.7 вспышка, **пересвет** на STEREO-A, $A=15^2/313=0,096$

11-21 Jan

Solar coronal magnetic field extrapolation from synchronic data with AI-generated farside

[Hyunjin Jeong](#), [Yong-Jae Moon](#), [Eunsu Park](#), [Harim Lee](#)

ApJ 2020

<https://arxiv.org/pdf/2010.07553.pdf>

12 Jan

Negative bursts

Grechnev et al., PASJ, 2013

Traveling ionospheric disturbances as huge natural lenses: Solar radio emission focusing effect,

[Koval](#), A., Y. Chen, A. Stanislavsky, and Q.-H. Zhang

(2017). J. Geophys. Res. Space Physics, 122 DOI: [10.1002/2017JA024080](https://doi.org/10.1002/2017JA024080)

<http://sci-hub.cc/10.1002/2017JA024080>

13 Jan – 06:16: C2.2 **пересвет** $A=8^2/313=0,05 \leftarrow 16s \ 8s \rightarrow 06:11 \ A=7^2/313=0.0447$

13 Jan

Solar Sources of 3He-rich Solar Energetic Particle Events in Solar Cycle 24

Nariaki V. [Nitta](#), Glenn M. Mason, Linghua Wang, Christina M. S. Cohen, Mark E. Wiedenbeck

ApJ 2015

<http://arxiv.org/pdf/1505.06804v1.pdf>

14 Jan – 13:21: M1.4 вспышка, **пересвет** на STEREO-B, $B=14^2/282=0,1$

14 Jan

Thermal Structure of Current Sheets and Supra-arcade Downflows in the Solar Corona

Will J. **Hanneman**^{1,2} and Katharine K. Reeves

2014 ApJ 786 95

15-26 Jan

On the non-Kolmogorov nature of flare-productive solar active regions

Revati S. **Mandage**, R.T. James McAteer

ApJ 2016

<https://arxiv.org/pdf/1611.00830v1.pdf>

16 Jan – 10:46: C5.5 вспышка, **пересвет** на STEREO-B, $B=10 \cdot 2/282=0,07$

16 Jan 2012 - Sunspot complex 1401-1402 erupted this morning at approximately 0400 UT, producing a C6-class LDE solar flare (SDO movie) and a bright CME

The Properties of Solar Energetic Particle Event-Associated Coronal Mass Ejections Reported in Different CME Catalogs

Ian G. **Richardson**, Tycho T. von Roseninge, Hilary V. Cane

Solar Phys. Volume 290, [Issue 6](#), pp 1741-1759 2015 **File**

<http://arxiv.org/pdf/1505.03071v1.pdf>

<https://sci-hub.ru/10.1007/s11207-015-0701-4>

Thermal Structure of Current Sheets and Supra-arcade Downflows in the Solar Corona

Will J. **Hanneman**^{1,2} and Katharine K. Reeves

2014 ApJ 786 95

17 Jan – 05:01: M1.0 вспышка, **пересвет** на STEREO-B, $B=15 \cdot 2/283=0,11$

18 Jan – 19:16: M1.7 вспышка, **пересвет** на STEREO-B, $B=18 \cdot 2/283=0,13$

January 18: A partial halo CME was observed after a filament eruption in the southern hemisphere near the central meridian. Activity increased in the filament after 08:50 UTC until eruption several hours later.

A New Automatic Tool for CME Detection and Tracking with Machine Learning Techniques

Pengyu **Wang**, [Yan Zhang](#), [Li Feng](#), [Hanqing Yuan](#), [Yuan Gan](#), [Shuting Li](#), [Lei Lu](#), [Beili Ying](#), [Weiqun Gan](#), [Hui Li](#)

ApJS 2019

<https://arxiv.org/pdf/1907.08798.pdf>

Forecasting propagation and evolution of CMEs in an operational setting: What has been learned

Yihua **Zheng**, Peter Macneice, Dusan Odstrcil, M. L. Mays, Lutz Rastaetter, Antti Pulkkinen, Aleksandre Taktakishvili, Michael Hesse, M. Masha Kuznetsova, Hyesook Lee and Anna Chulaki

Space Weather, Volume 11, Issue 10, pages 557–574, October 2013

<http://www.readcube.com/articles/10.1002/swe.20096?>

Height of Shock Formation in the Solar Corona Inferred from Observations of Type II Radio Bursts and Coronal Mass Ejections

N. **Gopalswamy**, H. Xie, P. Makela, S. Yashiro, S. Akiyama, W. Uddin., A. K. Srivastava, N. C. Joshi, R. Chandra, P. K. Manoharan, K. Mahalakshmi, V. C. Dwivedi, R. Jain and A. K. Awasthi, N. V. Nitta, M. J. Aschwanden, D. P. Choudhary

E-print, Jan 2013; Adv. Space Res.

19 Jan – 12:56: C3.2 вспышка, **пересвет** на STEREO-A, $A=9*2/313=0,058$

19 Jan 2012 - around 16:30 UT, producing an M3-class solar flare (N32E22) and a full-halo coronal mass ejection (CME). STEREO-B залимб. SEP

Improving the Arrival Time Estimates of Coronal Mass Ejections by Using Magnetohydrodynamic Ensemble Modeling, Heliospheric Imager data, and Machine Learning

Talwinder **Singh**, [Bernard Benson](#), [Syed A. Z. Raza](#), [Tae K. Kim](#), [Nikolai V. Pogorelov](#), [William P. Smith](#), [Charles N. Arge](#)

2023

<https://arxiv.org/pdf/2302.05588.pdf>

Tracking the Source of Solar Type II Bursts through Comparisons of Simulations and Radio Data

[Alexander M. Hegedus](#) (1), [Ward B. Manchester IV](#) (1), [Justin C. Kasper](#) (1)

ApJ 2021

<https://arxiv.org/pdf/2102.07875.pdf>

Repeated Coronal Condensations Caused by Magnetic Reconnection between Solar Coronal Loops

Leping [Li](#)^{1,2,3}, [Hardi Peter](#)⁴, [Lakshmi Pradeep Chitta](#)⁴, [Jun Zhang](#)^{1,3}, [Jiangtao Su](#)^{1,3}, [Hongqiang Song](#)², [Yijun Hou](#)^{1,3}, and [Chun Xia](#)⁵

2019 ApJ 884 34

<https://doi.org/10.3847/1538-4357/ab4134>

Quasi-periodic fast propagating magnetoacoustic waves during the magnetic reconnection between solar coronal loops

Leping [Li](#), [Jun Zhang](#), [Hardi Peter](#), [Lakshmi Pradeep Chitta](#), [Jiangtao Su](#), [Hongqiang Song](#), [Chun Xia](#), [Yijun Hou](#)

ApJL 2018

<https://arxiv.org/pdf/1811.08553.pdf>

Coronal Condensations Caused by Magnetic Reconnection between Solar Coronal Loops

Leping [Li](#)^{1,2,3}, [Jun Zhang](#)^{1,3}, [Hardi Peter](#)⁴, [Lakshmi Pradeep Chitta](#)⁴, [Jiangtao Su](#)^{1,3}, [Chun Xia](#)^{5,6}, [Hongqiang Song](#)², and [Yijun Hou](#)¹,

2018 ApJL 864 L4

<http://sci-hub.tw/http://iopscience.iop.org/article/10.3847/2041-8213/aad90a/meta>

Plasma diagnostics of coronal dimming events

Kamalam [Vanninathan](#), [Astrid M. Veronig](#), [Karin Dissauer](#), [Manuela Temmer](#)

ApJ 2018

<https://arxiv.org/pdf/1802.06152.pdf>

Origin of Radio Enhancements in Type II Bursts in the Outer Corona

Firas [Al-Hamadani](#), [Silja Pohjolainen](#), [Eino Valtonen](#)

[Solar Physics](#) September 2017, 292:127

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1148-6.pdf>

On the Spatial Distribution of Element Abundances and Ionization States in Solar Energetic-Particle Events

Donald V. [Reames](#)

Solar Phys. 2017

<https://arxiv.org/pdf/1705.07471.pdf>

Comparison of CME/shock propagation models with heliospheric imaging and in situ observations

Xinhua **Zhao**, Ying D. Liu, Bernd Inhester, [Xueshang Feng](#), [Thomas Wiegmann](#), [Lei Lu](#)

ApJS 2016

<http://arxiv.org/pdf/1607.05533v1.pdf>

A Study of the 2012 January 19 Complex Type II Radio Burst Using Wind, SOHO, and STEREO Observations

T.B. **Teklu**, A.V. Gholap, N. Gopalswamy, S. Yashiro, P. Mäkelä, S. Akiyama, N. Thakur, H. Xie

URSI Asia-Pacific Radio Science Conference in Seoul, August 21-25, 2016

<http://arxiv.org/pdf/1605.09644v1.pdf>

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

Dynamics of the Transition Corona

Sophie **Masson**^{1,2}, Patrick McCauley³, Leon Golub³, Katharine K. Reeves³, and Edward E. DeLuca

2014 ApJ 787 145

<http://arxiv.org/pdf/1301.0740v2.pdf>

Connecting speeds, directions and arrival times of 22 coronal mass ejections from the Sun to 1 AU

C. **Möstl**, K. Amla, J. R. Hall, P. C. Liewer, E. M. De Jong, R. C. Colaninno, A. M. Veronig, T. Rollett, M. Temmer, V. Peinhart, J. A. Davies, N. Lugaz, Y. D. Liu, C.J. Farrugia, J. G. Luhmann, B. Vršnak, R. A. Harrison, A. B. Galvin

ApJ, 2014

ApJ, 2014

<http://arxiv.org/pdf/1404.3579v1.pdf>

Understanding shock dynamics in the inner heliosphere with modeling and type ii radio data: a statistical study[†]

H. **Xie**, O. C. St. Cyr, N. Gopalswamy, D. Odstrcil, H. Cremades

JGR, 2013, File

ON SUN-TO-EARTH PROPAGATION OF CORONAL MASS EJECTIONS

Ying D. **Liu**^{1,2}, Janet G. Luhmann², Noé Lugaz³, Christian Möstl^{2,4}, Jackie A. Davies⁵, Stuart

D. Bale², and Robert P. Lin

2013 ApJ 769 45, File

19-23 Jan

Webb_ISEST (International Study for Earth-Affecting Solar Transients) _MM WG4 Campaign Events_2014, File

See http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_ICME%5CCME_Lists

20 Jan

Tracking Solar Phenomena from the SDO

Dustin J. **Kempton**, Michael A. Schuh, and Rafal A. Angryk

2018 ApJ 869 54

sci-hub.tw/10.3847/1538-4357/aae9e9

Three-Year Global Survey of Coronal Null Points from Potential-Field-Source-Surface (PFSS) Modeling and Solar Dynamics Observatory (SDO) Observations

Michael **Freed**, Dana Longcope, David McKenzie

Solar Physics, **2014**

<http://arxiv.org/pdf/1410.4493v1.pdf>

Height of Shock Formation in the Solar Corona Inferred from Observations of Type II Radio Bursts and Coronal Mass Ejections

N. **Gopalswamy**, H. Xie, P. Makela, S. Yashiro, S. Akiyama, W. Uddin., A. K. Srivastava, N. C. Joshi, R. Chandra, P. K. Manoharan, K. Mahalakshmi, V. C. Dwivedi, R. Jain and A. K. Awasthi, N. V. Nitta, M. J. Aschwanden, D. P. Choudhary

E-print, Jan **2013**; Adv. Space Res.

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

21 Jan

Analysis of signal to noise ratio in coronagraph observations of coronal mass ejections

Johannes **Hinrichs**, Jackie A. Davies, Matthew J. West, Volker Bothmer, Bram Bourgoignie, Chris J. Eyles, Philipp Huke, Piers Jiggins, Bogdan Nicula and James Tappin

J. Space Weather Space Clim. **2021**, 11, 11

<https://doi.org/10.1051/swsc/2020070>

<https://www.swsc-journal.org/articles/swsc/pdf/2021/01/swsc200025.pdf>

Dynamics of a Multi-Thermal Loop in the Solar Corona

G. **Nistico**, S. Anfinogentov, and V. M. Nakariakov

E-print, July **2014**; A&A

http://www2.warwick.ac.uk/fac/sci/physics/research/cfsa/people/nistico/publications/paper_multi_thermal_loop.pdf

22 Jan - ~14, NW filament eruption

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

The radial speed-expansion speed relation for Earth-directed CMEs

P. **Mäkelä**, N. Gopalswamy, S. Yashiro

Space Weather Volume 14, Issue 5 May **2016** Pages 368–378 **File**

<http://cdaw.gsfc.nasa.gov/publications/makela/makela2016SpaceWeather.pdf>

Forecasting propagation and evolution of CMEs in an operational setting: What has been learned

Yihua **Zheng**, Peter Macneice, Dusan Odstrcil, M. L. Mays, Lutz Rastaetter, Antti Pulkkinen, Aleksandre Taktakishvili, Michael Hesse, M. Masha Kuznetsova, Hyesook Lee and Anna Chulaki

Space Weather, Volume 11, Issue 10, pages 557–574, October **2013**

<http://www.readcube.com/articles/10.1002/swe.20096?>

22-23 Jan – форбуш и буря от эрупции 19-ого, Dst~-80 nT

Refined Modeling of Geoeffective Fast Halo CMEs During Solar Cycle 24

E. [Yordanova](#), [M. Temmer](#), [M. Dumbović](#), [C. Scolini](#), [E. Paouris](#), [A. L. E. Werner](#), [A. P. Dimmock](#), [L. Sorriso-Valvo](#)
Space Weather [Volume22, Issue1](#) e2023SW003497 2024
<https://doi.org/10.1029/2023SW003497>
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2023SW003497>

23 Jan – 04:16: M8.7 **пересвет** $A=40,5 \cdot 2/312=0,26 \leftarrow 16s \ 8s \rightarrow A=40,5/312=0,13$
широкая

23 Jan -03:45, M9 NNW N28W21 вспышка, мощный микроволновый всплеск,
большие длительные протоны с мягким спектром **Prolonged gamma**

First a long duration M1.1 event peaked near 03:05 UTC, an event which may have triggered a major M8.7 long duration event peaking at 03:59 UTC. These events were associated with a huge CME in STEREO imagery and what appears to be a strong proton event.

Two halo CMEs were observed after the M1.1 and M8.7 LDEs in region 11402. The presence of two CMEs was observable in LASCO imagery, although it is likely the CMEs will have merged before reaching Earth.

CORHEL-CME: An Interactive Tool For Modeling Solar Eruptions

[Jon Linker](#), [Tibor Torok](#), [Cooper Downs](#), [Ronald Caplan](#), [Viacheslav Titov](#), [Andres Reyes](#), [Roberto Lionello](#), [Pete Riley](#)

Journal of Physics Conference Series 2023

<https://arxiv.org/pdf/2311.03596.pdf>

Data-constrained Magnetohydrodynamic Simulation of an Intermediate Solar Filament Eruption

[Yang Guo](#), [Jinhan Guo](#), [Yiwei Ni](#), [M. D. Ding](#), [P. F. Chen](#), [Chun Xia](#), [Rony Keppens](#), [Kai E. Yang](#)

ApJ 2023

<https://arxiv.org/pdf/2309.01325.pdf>

Speed and Acceleration of CMEs Associated with Sustained Gamma-Ray Emission Events Observed by Fermi/LAT

[P. Mäkelä](#), [N. Gopalswamy](#), [S. Akiyama](#), [H. Xie](#), [S. Yashiro](#)

ApJ 2023

<https://arxiv.org/pdf/2307.05585.pdf> File

Solar Energetic Particles: Spatial Extent and Implications of the H and He Abundances Review

Donald V. Reames

Space Sci. Rev 2022

<https://arxiv.org/ftp/arxiv/papers/2205/2205.06883.pdf>

Global energetics of solar flares. XIII. The Neupert effect and acceleration of coronal mass ejections

[Markus J. Aschwanden](#)

ApJ 2021

<https://arxiv.org/pdf/2112.07759.pdf> File

The Common Origin of High-energy Protons in Solar Energetic Particle Events and Sustained Gamma-ray Emission from the Sun

[N. Gopalswamy](#), [S. Yashiro](#), [P. Makela](#), [H. Xie](#), [S. Akiyama](#)

ApJ 2021

<https://arxiv.org/ftp/arxiv/papers/2105/2105.01206.pdf>

Energetic Proton Back-Precipitation onto the Solar Atmosphere in Relation to Long-Duration Gamma-Ray Flares

Adam [Hutchinson](#), [Silvia Dalla](#), [Timo Laitinen](#), [Georgia A. de Nolfo](#), [Alessandro Bruno](#), [James M. Ryan](#)
ApJ 2020

<https://arxiv.org/pdf/2012.05146.pdf> File

Small Size Ground Level Enhancements During Solar Cycle 24

Leonty I. [Miroshnichenko](#), [Chuan Li](#) & [Victor G. Yanke](#)

[Solar Physics](#) volume 295, Article number: 102 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01659-3.pdf>

Virtues of Including Hydrogen in the Patterns of Element Abundances in Solar Energetic Particles

Donald V. [Reames](#)

[Solar Phys.](#) 2020

<https://arxiv.org/ftp/arxiv/papers/2004/2004.12229.pdf>

Initiation and Early Kinematic Evolution of Solar Eruptions

X. [Cheng](#), [J. Zhang](#), [B. Kliem](#), [T. {Török}](#), [C. Xing](#), [Z. J. Zhou](#), [B. Inhester](#), [M. D. Ding](#)

ApJ 2020

<https://arxiv.org/pdf/2004.03790.pdf>

Fermi Large Area Telescope observations of solar flares during the 24th solar cycle

Melissa [Pesce-Rollins](#)

Presentation at the Fleishman Webinar Nov. 13, 2019

http://www.ioffe.ru/LEA/SF_AR/files/FermiLATSolarFlares_webinar.pdf

A Study of Pre-Flare Solar Coronal Magnetic Fields: Magnetic Flux Ropes

Aiyong [Duan](#), [Chaowei Jiang](#), [Wen He](#), [Xueshang Feng](#), [Peng Zou](#), [Jun Cui](#)

ApJ 2019

<https://arxiv.org/pdf/1908.08643.pdf>

On the Shock Source of Sustained Gamma-Ray Emission from the Sun

N [Gopalswamy](#), [P. Makela](#), [S. Yashiro](#), [A. Lara](#), [S. Akiyama](#), [H. Xie](#)

18th International Astrophysics Conference, Pasadena, CA, February 18 to 22, 2019

2019

<https://arxiv.org/ftp/arxiv/papers/1907/1907.13318.pdf> File

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha [Sachdeva](#)

Ph.D. **Thesis** 2019

<https://arxiv.org/pdf/1907.12673.pdf>

Comparing Long-Duration Gamma-Ray Flares and High-Energy Solar Energetic Particles

G. A. [de Nolfo](#), [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J.](#)

[Stochaj](#), [G. A. Bazilevskaya](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ 2019

<https://arxiv.org/pdf/1905.12878.pdf> File

Hydrogen and the Abundances of Elements in Gradual Solar Energetic-Particle Events

Donald V. [Reames](#)

[Solar Phys.](#) 2019

<https://arxiv.org/ftp/arxiv/papers/1902/1902.03208.pdf>

HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE

Thesis Catalog (2010-2017)

Allafort, A. J.

(2018). PhD thesis, Stanford Univ. **File**

https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf

Magnetic Flux Reconnection in Flaring Active Regions with Sustained Gamma-Ray Emission

S. W. **Kahler**¹, E. W. Cliver², and M. Kazachenko³

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Global Energetics of Solar Flares: IV. Coronal Mass Ejection Energetics

Markus J. Aschwanden

ApJ 2016

<http://arxiv.org/pdf/1605.04952v1.pdf> File

http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf

Interplanetary Type IV Bursts

Alexander [Hillar](#)is, Constantine Bouratzis, Alexander Nindos

[Solar Physics](#) 2016

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Dark Post-Flare Loops Observed by Solar Dynamics Observatory

Qiao [Song](#), Jing-Song Wang, Xueshang Feng, Xiaoxin Zhang

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Possible ground level enhancements at the beginning of the maximum of Solar Cycle 24.

[Belov](#), A., Eroshenko, E., Kryakunova, O., Nikolayevskiy, N., Malimbayev,

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Thermodynamic Spectrum of Solar Flares Based on SDO/EVE Observations: Techniques and First Results

Yuming [Wang](#), [Zhenjun Zhou](#), [Jie Zhang](#), [Kai Liu](#), [Rui Liu](#), [Chenglong Shen](#), [Phillip C. Chamberlin](#)

2015

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High-energy solar particle events in cycle 24

Nat [Gopalswamy](#), [Pertti Makela](#), [Seiji Yashiro](#), [Hong Xie](#), [Sachiko Akiyama](#), [Neeharika Thakur](#)
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How Common are Hot Magnetic Flux Ropes in the Low Solar Corona? A Statistical Study of EUV Observations

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Extreme Ultraviolet Imaging of Three-dimensional Magnetic Reconnection in a Solar Eruption

J. Q. [Sun](#), X. Cheng, M. D. Ding, [Y. Guo](#), [E. R. Priest](#), [C. E. Parnell](#), [S. J. Edwards](#), [J. Zhang](#), [P. F. Chen](#), [C. Fang](#)
Nature Communications 6, Article number: 7598, 2015
<http://arxiv.org/pdf/1506.08255v1.pdf>

Interplanetary particle transport simulation for warning system for aviation exposure to solar energetic particles

Yûki [Kubo](#), Ryuho Kataoka, Tatsuhiko Sato
Earth, Planets and Space 2015
<http://arxiv.org/pdf/1506.00825v1.pdf>

A Simple Way to Estimate the Soft X-ray Class of Far-Side Solar Flares Observed with STEREO/EUVI

I.M. Chertok (1), A.V. Belov (1), V.V. Grechnev (2)
Solar Phys. 2015

First Taste of Hot Channel in Interplanetary Space

H. Q. [Song](#)¹, J. Zhang², Y. Chen¹, X. Cheng³, G. Li⁴, and Y. M. Wang
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Observation of solar high energy gamma and X-ray emission and solar energetic particles

Alexei [Struminsky](#), Weiqun Gan
24th European Cosmic Ray Symposium, Kiel, September 2014, 2015

Proton activity of the Sun in current solar cycle 24

Chuan [Li](#), Leonty Miroshnichenko, Cheng Fang
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Thermal Structure of Current Sheets and Supra-arcade Downflows in the Solar Corona

Will J. [Hanneman](#)^{1,2} and Katharine K. Reeves
2014 ApJ 786 95

Emission Height and Temperature Distribution of White-Light Emission Observed by Hinode/SOT from the 2012 January 27 X-class Solar Flare

Kyoko [Watanabe](#), Toshifumi Shimizu, Satoshi Masuda, Kiyoshi Ichimoto, and Masanori Ohno
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Understanding shock dynamics in the inner heliosphere with modeling and type ii radio data: a statistical study†

H. [Xie](#), O. C. St. Cyr, N. Gopalswamy, D. Odstrcil, H. Cremades
JGR, 2013, **File**

**СОЛНЕЧНЫЕ ПРОТОННЫЕ СОБЫТИЯ В КОНЦЕ 23-ГО И НАЧАЛЕ 24-ГО
СОЛНЕЧНЫХ ЦИКЛОВ, ЗАРЕГИСТРИРОВАННЫЕ В ЭКСПЕРИМЕНТЕ ПАМЕЛА**

Базилевская Г.А., Майоров А.Г., Малахов В.В., Михайлов В.В., Адриани О., Барбарино Д.С., Белотти Р., Боецио М., Богомолов Э.А., Бонвичини В., Бонджи М., Бонеки Л., Борисов С.В., Боттаи С., Бруно А., Вакки А., Вануччини Е., Васильев Г.И., Воронов С.А., Ву Ю. и др.
Известия РАН, Серия физическая, том 77, № 5, с. 557–560, **2013**.

**How Many CMEs Have Flux Ropes? Deciphering the Signatures of Shocks, Flux Ropes,
and Prominences in Coronagraph Observations of CMEs** **Review**

A. **Vourlidas**, B.J. Lynch, R.A. Howard, Y. Li
E-print, July **2012**; Solar Phys. **2013**, Volume 284, Issue 1, pp 179-201, **File**

**HIGH-ENERGY GAMMA-RAY EMISSION FROM SOLAR FLARES: SUMMARY OF FERMI
LAT DETECTIONS AND ANALYSIS OF TWO M-CLASS FLARES**

M. **Ackermann**², M. Ajello³, A. Albert⁴, A. Allafort^{5,1}, L. Baldini⁶, G. Barbiellini^{7,8}, D. Bastieri et al.
Fermi-LAT collaboration
E-print, April **2013**, **File**; ApJ

**Polarization Emission of Millimeter Activity at the Sun (POEMAS): New Circular Polarization
Solar Telescopes at Two Millimeter Wavelength Ranges**

Adriana **Valio**, P. Kaufmann, C. G. Giménez de Castro, J.-P. Raulin, L. O. T. Fernandes, A. Marun
Solar Physics, April **2013**, Volume 283, Issue 2, pp 651-665

**THE FIRST GROUND LEVEL ENHANCEMENT EVENT OF SOLAR CYCLE 24: DIRECT
OBSERVATION OF SHOCK FORMATION AND PARTICLE RELEASE HEIGHTS**

N. **Gopalswamy**¹, H. Xie^{1,2}, S. Akiyama^{1,2}, S. Yashiro^{1,2}, I. G. Usoskin³, and J. M. Davila
2013 ApJ 765 L30, preprint **File**

Solar energetic particle events in 2006-2012 in the PAMELA experiment data

G A **Bazilevskaya** et al
2013 J. Phys.: Conf. Ser. 409 012188

Large SEP events of 2012: proton onset and source function

Alexei **Struminsky**
2013 J. Phys.: Conf. Ser. 409 012148

Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. **Gopalswamy**
E-print, Jan 2013, **File**; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, **2012**

The SEP event of 2012 January 27: proton onset and source function

Alexei Struminsky
ECRS_2012, sh_194.

27-31 Jan

**Sun-to-Earth Observations and Characteristics of Isolated Earth-Impacting Interplanetary
Coronal Mass Ejections During 2008 – 2014**

D. **Maričić**, **B. Vršnak**, **A. M. Veronig**, **M. Dumbović**, **F. Šterc**, **D. Roša**, **M. Karlica**, **D. Hržina** & **I. Romštajn**
Solar Physics volume 295, Article number: 91 (**2020**)
<https://link.springer.com/content/pdf/10.1007/s11207-020-01658-4.pdf>

28 Jan

Implications of improved measurements of the highest energy SEPs by AMS and PAMELA **Review**

K. [Whitman](#), V. Bindi, C. Consolandi, [C. Corti](#), [B. Yamashiro](#)
Advances in Space Research Volume 60, Issue 4, 15 August 2017, Pages 768–780
<http://sci-hub.cc/10.1016/j.asr.2017.02.042>

Characterizing Solar Energetic Particle Event Profiles with Two-Parameter Fits

Stephen W. [Kahler](#), Alan G. Ling
Solar Physics April 2017, 292:59
<http://link.springer.com/content/pdf/10.1007%2Fs11207-017-1085-4.pdf>

Solar Activity from 2006 to 2014 and Short-term Forecasts of Solar Proton Events Using the ESPERTA Model

T. Alberti¹, M. Laurenza², E. W. Cliver³, M. Storini², G. Consolini², and F. Lepreti
2017 *ApJ* 838 59 File
<http://sci-hub.cc/10.3847/1538-4357/aa5cb8>

Solar Energetic Particle Events with Protons Above 500 MeV Between 1995 and 2015 Measured with SOHO/EPHIN

P. Köhl, N. Dresing, B. Heber, A. Klassen
Solar Physics January 2017, 292:10
<http://link.springer.com/article/10.1007/s11207-016-1033-8>

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans
2014
<http://arxiv.org/pdf/1409.1422v1.pdf>

29 Jan

On the Role of Interplanetary Shocks in Accelerating MeV Electrons

N. Talebpour [Sheshvan](#), [N. Dresing](#), [R. Vainio](#), [A. Afanasiev](#), [D. E. Morosan](#)
A&A 2023
<https://arxiv.org/pdf/2301.05587.pdf>

Proton Energy Spectra of Energetic Storm Particle Events and Relation with Shock Parameters and Turbulence

Federica [Chiappetta](#)¹, Monica Laurenza², Fabio Lepreti^{1,3}, and Giuseppe Consolini²
2021 *ApJ* 915 8
<https://doi.org/10.3847/1538-4357/abfe09>
<https://iopscience.iop.org/article/10.3847/1538-4357/abfe09/pdf>

The chromospheric magnetic field in active regions derived from spectropolarimetry of Ca II 8542

Ali G. A. [Abdelkawy](#), [Abdelrazek M. K. Shaltout](#), [M. M. Beheary](#)
Global Journal of Advanced Research (GJAR) 2017
<https://arxiv.org/ftp/arxiv/papers/1712/1712.06828.pdf>

Inference of chromospheric magnetic fields in a sunspot derived from spectropolarimetry of Ca II 8542 A

Ali G. A. [Abdelkawy](#), [Abdelrazek M. K. Shaltout](#), [M. M. Beheary](#), [T. A. Schad](#)
Al-Azhar Bull. Sci. 2017
<https://arxiv.org/ftp/arxiv/papers/1712/1712.06829.pdf>

He I vector magnetic field maps of a sunspot and its superpenumbral fine-structure

T.A. [Schad](#), M.J. Penn, H. Lin, A. Tritschler
Solar Phys. **2015**
<http://arxiv.org/pdf/1505.05567v1.pdf>

31 Jan

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. [Howard](#)¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden
2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86
<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>
<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

Feb-Oct 2012

**3-Phase Evolution of a Coronal Hole,
Part II: The Magnetic Field**

S.G. [Heinemann](#), [S.J. Hofmeister](#), [A.M. Veronig](#), [M. Temmer](#)
ApJ **2018**
<https://arxiv.org/pdf/1806.10052.pdf>

**3-Phase Evolution of a Coronal Hole,
Part I: 360° remote sensing and in-situ observations**

S.G. [Heinemann](#), [M. Temmer](#), [S.J. Hofmeister](#), [A.M. Veronig](#), [S. Vennerstroem](#)
ApJ **2018**
<https://arxiv.org/pdf/1806.09495.pdf>

1 Feb

**Relationship Between Solar Coronal X-Ray Brightness and Active Region Magnetic Fields:
A Study Using High Resolution Observations**

Soumitra [Hazra](#), Dibyendu Nandy, B Ravindra
2014
<http://arxiv.org/pdf/1406.1683v1.pdf>

4 Feb

Investigating Remote-sensing Techniques to Reveal Stealth Coronal Mass Ejections

[Erika Palmerio](#), [Nariaki V. Nitta](#), [Tamitha Mulligan](#), [Marilena Mierla](#), [Jennifer O'Kane](#), [Ian G. Richardson](#), [Suvadip Sinha](#), [Nandita Srivastava](#), [Stephanie L. Yardley](#), [Andrei N. Zhukov](#)
Frontiers in Astronomy and Space Sciences **2021**
<https://arxiv.org/pdf/2106.07571.pdf>

Flare Induced Sunquake Signatures in the Ultraviolet as Observed by the Atmospheric Imaging Assembly

[Sean Quinn](#), [Mihalis Mathioudakis](#), [Christopher J. Nelson](#), [Ryan O. Milligan](#), [Aaron Reid](#), [David B. Jess](#)
ApJ **2021**
<https://arxiv.org/pdf/2105.05704.pdf>

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans
2014
<http://arxiv.org/pdf/1409.1422v1.pdf>

5-8 Feb

RATAN-600 Observations of Small Scale Structures with High Spectral Resolution

V. M. **Bogod**, C. E. Alissandrakis, T. I. Kaltman, S. Kh. Tokhchukova

Solar Phys., **2014**

<http://arxiv.org/pdf/1403.7658v1.pdf>

6 Feb – 19:56 – M1.0 вспышка; **пересвет** на STEREO-A, $A=10^2/313=0,06$ сомнительный

6 Feb

Magnetic field evolution around a fast-moving pore emerging from the quiet Sun*

Zhe **Xu**^{1,2,*}, Haisheng Ji¹, Junchao Hong², Kaifan Ji² and Jiayan Yang²

A&A 660, A55 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/04/aa43021-21.pdf>

How Common are Hot Magnetic Flux Ropes in the Low Solar Corona? A Statistical Study of EUV Observations

A. **Nindos**, S. Patsourakos, A. Vourlidas, C. Tagikas

ApJ **2015**

<http://arxiv.org/pdf/1507.03766v1.pdf>

7 Feb – 17:31: C6.8 вспышка, **пересвет** на STEREO-A, $A=8^2/313=0,051$

8 Feb – 22:16: C2.9 **пересвет** $A=22^2/313=0,14$ $\leftarrow 16s$ $8s \rightarrow A=22/313=0,07$

8 Feb - ~04 UT, SW eruption.

Apparent Solar Tornado - Like Prominences

Olga **Panasenco**, Sara F. Martin, Marco Velli

E-print, July **2013**, Solar Phys. Volume 289, Issue 2, pp.603-622, **2014**

<http://arxiv.org/pdf/1307.2303v1.pdf>

9 Feb - During the late hours of Feb. 9th, a dark magnetic filament winding over the sun's northeastern limb rose up and exploded. The eruption hurled a bright CME.

Measuring three-dimensional shapes of stable solar prominences using stereoscopic observations from SDO and STEREO

Chengrui **Zhou**, [Chun Xia](#), [Yuandeng Shen](#)

A&A **2021**

<https://arxiv.org/pdf/2103.07111.pdf>

C.J. **Schrijver**, A.M. Title, A.R. Yeates and M.L. DeRosa

E-print, May **2013**, File; ApJSS

10 Feb - >18 UT: заметная эрупция NE волокна, **304 A, a partial halo CME**

A magnetic cloud prediction model for forecasting space weather relevant properties of Earth-directed coronal mass ejections

Sanchita **Pal**, [Dibyendu Nandy](#), [Emilia K J Kilpua](#)

A&A **2022**

<https://arxiv.org/pdf/2203.05231.pdf>

Chirality and Magnetic Configurations of Solar Filaments

Y. **Ouyang**, Y. H. Zhou, P. F. Chen, C. Fang
ApJ 835 94 2017
<https://arxiv.org/pdf/1612.01054v1.pdf>
<http://sci-hub.cc/10.3847/1538-4357/835/1/94>

Dark Ribbons Propagating and Sweeping across Extreme Ultraviolet Structures after Filament Eruptions

Junmin **Xiao**, Jun Zhang, Ting Li, and Shuhong Yang
2015 ApJ 805 25

11 Feb –

Observationally quantified reconnection providing a viable mechanism for active region coronal heating

Kai E. **Yang**, [Dana W. Longcope](#), [M. D. Ding](#) & [Yang Guo](#)
Nature Communications volume 9, Article number: 692 (2018)
<https://www.nature.com/articles/s41467-018-03056-8.pdf>

H α and EUV observations of a partial CME

Damian J. **Christian**, David B. Jess, Patrick Antolin, Mihalis Mathioudakis
ApJ, 2015

12 Feb

Phase speed and frequency-dependent damping of longitudinal intensity oscillations in coronal loop structures observed with AIA/SDO

A. **Abedini**
Astrophysics and Space Science April 2016, 361:133
<http://arxiv.org/pdf/1603.04207v1.pdf>

Microwave Type III Pair Bursts in Solar Flares

Baolin **Tan**, Hana Meszarosova, Marian Karlicky, Guangli Huang, Chengming Tan
ApJ 2016
<http://arxiv.org/pdf/1601.05312v1.pdf>

14 Feb

Nonlinear Fast Magnetosonic Waves in Solar Prominence Pillars

Leon **Ofman**, [Therese A. Kucera](#), [C. Richard DeVore](#)
ApJ 2023
<https://arxiv.org/pdf/2301.04503.pdf>

18-19 Feb

The Source Locations of Major Flares and CMEs in the Emerging Active Regions

[Lijuan Liu](#), [Yuming Wang](#), [Zhenjun Zhou](#), [Jun Cui](#)
ApJ 2021
<https://arxiv.org/pdf/2101.07452.pdf>

18-22 Feb

Magnetic helicity and energy of emerging solar active regions and their eruptivity

E. **Liokati** (1), [A. Nindos](#) (1), [Y. Liu](#) (2)
A&A 2022
<https://arxiv.org/pdf/2202.04353.pdf>

20 Feb – 05:11: C4.1 вспышка, **пересвет** на STEREO-B, $B=9*2/289=0,062$

20 Feb

Statistical Analysis of Asymmetric Sunspot Decay Observed by Hinode

Shinsuke [Imada](#), [Shota Kato](#) & [Masashi Fujiyama](#)

Solar Physics volume 295, Article number: 154 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01724-x.pdf>

20-29 Feb

Comparison of JPL and ESP Solar Proton Fluence Models Using the Background-Subtracted RDSv2.0 Data Set

B. X. [Zhu](#), [K. Whitman](#), [I. Jun](#), [J. M. Ratliff](#)

Space Weather [Volume21, Issue3](#) e2022SW003311 2023

<https://doi.org/10.1029/2022SW003311>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2022SW003311>

22 Feb

Revisiting the formation mechanism for coronal rain from previous studies

[Leping Li](#), [Hardi Peter](#), [Lakshmi Pradeep Chitta](#), [Hongqiang Song](#)

Research in Astronomy and Astrophysics 2021

<https://arxiv.org/pdf/2107.01339.pdf>

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia [Alzate](#) and Huw Morgan

2017 *ApJ* 840 103

<http://sci-hub.cc/10.3847/1538-4357/aa6caa>

Formation and evolution of coronal rain observed by SDO/AIA on February 22, 2012

Z. [Vashalomidze](#), [V. Kukhianidze](#), [T.V. Zaqarashvili](#), [R. Oliver](#), [B. Shergelashvili](#), [G. Ramishvili](#), [S. Poedts](#), [P. De Causmaecker](#)

A&A 2015

<http://arxiv.org/pdf/1504.03471v1.pdf>

Observational Characteristics of **CMEs without Low Coronal Signatures**

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

Propagation of Interplanetary Coronal Mass Ejections: The Drag-Based Model

B. [Vršnak](#), T. Žic, D. Vrbanec, M. Temmer, T. Rollett, C. Möstl, A. Veronig, J. Čalogović, M. Dumbović and S. Lulić, et al.

Solar Physics, July 2013, Volume 285, Issue 1-2, pp 295-315, [File](#)

23 Feb

Low-Coronal Sources of "Stealth" Coronal Mass Ejections

Nathalia [Alzate](#) & Huw Morgan

UKSP Nuggets of 2016 #69

<http://www.uksolphys.org/uksp-nugget/69-low-coronal-sources-of-stealth-coronal-mass-ejections/>

Filament Shape Versus Coronal Potential Magnetic Field Structure

Boris [Filippov](#)

MNRAS 2015

<http://arxiv.org/pdf/1510.04546v1.pdf>

Why does the apparent mass of a coronal mass ejection increase?

Li [Feng](#), Yuming Wang, [Fang Shen](#), [Chenglong Shen](#), [Bernd Inhester](#), [Lei Lu](#), [Weiqun Gan](#)

ApJ 2015
<http://arxiv.org/pdf/1509.02246v1.pdf>

Observational Characteristics of CMEs without Low Coronal Signatures

E. D'Huys, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

24 Feb - >00 UT: **крупная эрупция NE волокна** (после заметной динамики в конце 23-его); большие димминги и аркада; крупный CME

A STEREO Survey of Magnetic Cloud Coronal Mass Ejections Observed at Earth in 2008-2012

Brian E. Wood, Chin-Chun Wu, Ronald P. Lepping, [Teresa Nieves-Chinchilla](#), [Russell A. Howard](#), [Mark G. Linton](#), [Dennis G. Socker](#)

Astrophysical Journal Supplement 2017 File

<https://arxiv.org/pdf/1701.01682v1.pdf>

Dark Ribbons Propagating and Sweeping across Extreme Ultraviolet Structures after Filament Eruptions

Junmin Xiao, Jun Zhang, Ting Li, and Shuhong Yang

2015 ApJ 805 25

25 Feb

Radio and X-ray Observations of Short-lived Episodes of Electron Acceleration in a Solar Microflare

[Rohit Sharma](#), [Marina Battaglia](#), [Yingjie Luo](#), [Bin Chen](#), [Sijie Yu](#)

ApJ 2020

<https://arxiv.org/pdf/2009.14497.pdf>

29 Feb - On Feb. 29th, a farside sunspot erupted multiple times, hurling three CMEs over the sun's western limb.

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia Alzate and Huw Morgan

2017 ApJ 840 103

<http://sci-hub.cc/10.3847/1538-4357/aa6caa>

Observational Characteristics of CMEs without Low Coronal Signatures

E. D'Huys, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

March

Establishing a Stereoscopic Technique for Determining the Kinematic Properties of Solar Wind Transients based on a Generalized Self-similarly Expanding Circular Geometry

J. A. Davies¹, C. H. Perry¹, R. M. G. M. Trines^{2,3}, R. A. Harrison¹, N. Lugaz⁴, C. Möstl^{5,6,7}, Y. D. Liu⁸, and K. Steed

2013 ApJ 777 167

2 March – 18:16: M3.3 **пересвет** B=33*2/291=0,23 ←16s 8s→ 17:56 B=21*2/291=

2 March - A big new sunspot is emerging over the sun's northeastern limb. It announced itself on March 2nd at 1746 UT with an M3-class solar flare.

2-15 March 'HURRICANE' SEASON

Hurricane Season in the Inner Heliosphere: Observations of Coronal Mass Ejections during Solar Maximum **Review**

A. **Vourlidas**

The 11th Hellenic Astronomical Conference, 8-12 September 2013, Athens; **File of Presentation**

<http://www.helas.gr/conf/2013/presentations.php>

3 March

Rejuvenating Solar Flare Termination Shocks as Particle Accelerators

Bin **CHEN**

RHESSI Science Nuggets #378 2020

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Rejuvenating_Solar_Flare_Termination_Shocks_as_Particle_Accelerators

Solar Flare Observations with the Karl G. Jansky Very Large Array

Bin **Chen**

Presentation at the Fleishman's Webinar, April 2020

http://www.ioffe.ru/LEA/SF_AR/files/Chen_solarwebinar_20200401.pdf

Radio Spectroscopic Imaging of a Solar Flare Termination Shock: Split-Band Feature as Evidence for Shock Compression

Bin **Chen** (1), [Chengcai Shen](#) (2), [Katharine K. Reeves](#) (2), [Fan Guo](#) (3 and 4), [Sijie Yu](#) (1)

ApJ **2019**

<https://arxiv.org/pdf/1908.09146.pdf>

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha **Sachdeva**

Ph.D. **Thesis 2019**

<https://arxiv.org/pdf/1907.12673.pdf>

Transient Inverse-FIP Plasma Composition Evolution within a Confined Solar Flare

Deborah **Baker**, [Lidia van Driel-Gesztelyi](#), [David H. Brooks](#), [Gherardo Valori](#), [Alexander W. James](#), [J. Martin Laming](#), [David M. Long](#), [Pascal Demoulin](#), [Lucie M. Green](#), [Sarah A. Matthews](#), [Katalin Olah](#), [Zsolt Kovari](#)

2019

<https://arxiv.org/pdf/1902.06948.pdf>

Dynamic Spectral Imaging of Decimetric Fiber Bursts in an Eruptive Solar Flare

Zhitao **Wang**, [Bin Chen](#), [Dale E. Gary](#)

ApJ **2017**

<https://arxiv.org/pdf/1709.08137.pdf>

Particle Acceleration by a Solar Flare Termination Shock

Bin **Chen** (1), Timothy S. Bastian (2), Chengcai Shen (1), [Dale E. Gary](#) (3), [Sam Krucker](#) (4, 5), [Lindsay Glesener](#)

Science 4 December **2015**: Vol. 350 no. 6265 pp. 1238-1242

<http://arxiv.org/ftp/arxiv/papers/1512/1512.02237.pdf>

RHESSI Heliophysics Senior **Review 2015**

High Energy Solar Spectroscopic Imager

Samuel **Krucker**, Brian Dennis, Albert Shih, Manfred Bester

http://hesperia.gsfc.nasa.gov/senior_review/2015/senior_review_proposal_2015.pdf

Direct Evidence of an Eruptive, Filament-Hosting Magnetic Flux Rope Leading to a Fast Solar Coronal Mass Ejection

Bin **Chen**, Timothy S. Bastian, Dale E. Gary

ApJ, 2014

<http://arxiv.org/pdf/1408.6473v1.pdf>

4 March – 11:11: M2.0 вспышка, **пересвет** на STEREO-B, $B=16 \cdot 2/292=0,11$

4 March – NE region 11429 produced a **long duration M2.0/1N event** peaking at **10:52 UTC**. This event was associated with a wide CME, possibly a full halo CME, and a minor increase in proton background levels. **Медленно дрейфующий континуум в начале события на нашем спектре. Интенсивный микроволновый всплеск.**

Reconstruction of the magnetic connection from Mercury to the solar corona during enhancements in the solar proton fluxes at Mercury

A. **Ippolito**^{1,2}, C. Plainaki¹, G. Zimbardo³, T. Alberti⁴, S. Massetti⁴, A. Milillo⁴ and S. Orsini⁴
A&A 660, A50 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/04/aa42328-21.pdf>

An Observational Revisit of Stationary Type IV Solar Radio Bursts

Maoshui Lv, **Yao Chen**, **V. Vasanth**, **Mohd Shazwan Radzi**, **Zamri Zainal Abidin** & **Christian Monstein**
Solar Physics volume 296, Article number: 38 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01769-6.pdf>

Асимметрия в появлении лидирующей и последующей полярностей в фотосферном магнитном поле на ранней стадии образования активной области.

Григорьев В.М., Ермакова Л.В., Хлыстова А.И.

Солнечно-земная физика". Т. 6, № 4, С. 3–9. 2020

<https://naukaru.ru/ru/storage/viewWindow/61999>

Polarisation and source structure of solar stationary type IV radio bursts★

Carolina **Salas-Matamoros**¹ and Karl-Ludwig Klein

A&A 639, A102 (2020)

<https://www.aanda.org/articles/aa/pdf/2020/07/aa37989-20.pdf>

An Eruptive Hot-Channel Structure Observed at Metric Wavelength as a Moving Type-IV Solar Radio Burst

V. **Vasanth**, Yao Chen, Shiwei Feng, **Suli Ma**, **Guohui Du**, **Hongqiang Song**, **Xiangliang Kong**, **Bing Wang**

ApJL 2016

<http://arxiv.org/pdf/1609.06546v1.pdf>

Interplanetary Type IV Bursts

Alexander **Hillarlis**, Constantine Bouratzis, Alexander Nindos

Solar Physics 2016

<http://arxiv.org/pdf/1604.07677v1.pdf> File

The Relation Between Large-Scale Coronal Propagating Fronts and Type II Radio Bursts

Nariaki V. **Nitta**, Wei Liu, Nat Gopalswamy, Seiji Yashiro

Solar Phys., 2014

http://www.lmsal.com/nitta/publ/SP_typeII_20140904.pdf

<http://arxiv.org/pdf/1409.4754v1.pdf> File

4-7 March

Relationship between Successive Flares in the Same Active Region and Space-Weather HMI Active Region Patch (SHARP) Parameters

[Hao Ran](#), [Ying D. Liu](#), [Yang Guo](#), [Rui Wang](#)

ApJ 2022

<https://arxiv.org/pdf/2207.07254.pdf>

Assessing the collision nature of coronal mass ejections in the inner heliosphere

Wageesh [Mishra](#), [Yuming Wang](#), [Nandita Srivastava](#), [Chenglong Shen](#)

ApJ Supplement Series 2017

<https://arxiv.org/pdf/1707.08299.pdf>

Sunspots rotation and magnetic transients associated with flares in NOAA AR 11429

Jianchuan [Zheng](#), Zhiliang Yang, Jianpeng Guo, Kaiming Guo, Hui Huang, Xuan Song, Weixing Wan
Research in Astronomy and Astrophysics (RAA) 2017

<https://arxiv.org/pdf/1704.08018.pdf>

Why is a flare-rich active region CME-poor?

Lijuan [Liu](#), Yuming Wang, Jingxiu Wang, [Chenglong Shen](#), [Pinzhong Ye](#), [Rui Liu](#), [Jun Chen](#), [Quanhao Zhang](#), [S. Wang](#)

2016

<http://arxiv.org/pdf/1607.07531v1.pdf> File

МОРФОЛОГИЯ, ДИНАМИКА И ОСОБЕННОСТИ МАГНИТНОЙ КОНФИГУРАЦИИ АКТИВНЫХ ОБЛАСТЕЙ ПЕРЕД ВСПЫШКАМИ РЕНТГЕНОВСКОГО КЛАССА X
Фурсяк Ю.А.

Пулково «Солнечная и солнечно-земная физика – 2015», с.371

НАКОПЛЕНИЕ МАГНИТНОЙ ЭНЕРГИИ В КОРОНАЛЬНОМ ТОКОВОМ СЛОЕ В ПРЕДВСПЫШЕЧНОМ СОСТОЯНИИ АКТИВНОЙ ОБЛАСТИ СОЛНЦА

И.М. [Подгорный](#), А.И. Подгорный

ИКИ-2014, Сессия: Солнце

<http://plasma2014.cosmos.ru/presentations>

5 March – 04:16: X1.1 **пересвет** $B=73,5 \cdot 2/292=0,5 \leftarrow 16s \ 8s \rightarrow B=73,5/292=0,252$

14:56: C5.5 вспышка, **пересвет** на STEREO-B, $B=10 \cdot 2/289=0,069$

15:36: C7.8 вспышка, **пересвет** на STEREO-B, $B=9 \cdot 2/289=0,062$

19:16: M2.1 вспышка, **пересвет** на STEREO-B, $B=18 \cdot 2/292=0,12$

19:31 M1.8 вспышка, **пересвет** на STEREO-B, $B=12 \cdot 2/292=0,08$

22:36: M1.3 вспышка, **пересвет** на STEREO-B, $B=12 \cdot 2/292=0,08$

5 March - The X1 flare (N17E52) peaked at 0413 UT. Динамический спектр похож на 4 марта. **Мощный микроволновый всплеск. The explosion also hurled a bright CME into space.** После этой LDE вспышки пошли импульсные вспышки. **Prolonged gamma**

An Observational Revisit of Stationary Type IV Solar Radio Bursts

[Maoshui Lv](#), [Yao Chen](#), [V. Vasanth](#), [Mohd Shazwan Radzi](#), [Zamri Zainal Abidin](#) & [Christian Monstein](#)
[Solar Physics](#) volume 296, Article number: 38 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01769-6.pdf>

Energetic Proton Back-Precipitation onto the Solar Atmosphere in Relation to Long-Duration Gamma-Ray Flares

Adam [Hutchinson](#), [Silvia Dalla](#), [Timo Laitinen](#), [Georgia A. de Nolfo](#), [Alessandro Bruno](#), [James M. Ryan](#)
ApJ 2020
<https://arxiv.org/pdf/2012.05146.pdf> File

Evolution of the Toroidal Flux of CME Flux Ropes during Eruption

[C. Xing](#), [X. Cheng](#), [M. D. Ding](#)
The Innovation 2020
<https://arxiv.org/pdf/2011.10750.pdf>

The Lyman-alpha Emission in Solar Flares. I. a Statistical Study on Its Relationship with the 1--8 Å Soft X-ray Emission

[Zhichen Jing](#), [Wuqi Pan](#), [Yukun Yang](#), [Dechao Song](#), [Jun Tian](#), [Y. Li](#), [X. Cheng](#), [Jie Hong](#), [M. D. Ding](#)
ApJ 2020
<https://arxiv.org/pdf/2009.10358.pdf>

Interplanetary Radio Emission: A Summary of Recent Results

Review

Nat [Gopalswamy](#)
Journal of Computational and Interdisciplinary Science 2020
<https://arxiv.org/ftp/arxiv/papers/2008/2008.09222.pdf> File

On the Shock Source of Sustained Gamma-Ray Emission from the Sun

N [Gopalswamy](#), [P. Makela](#), [S. Yashiro](#), [A. Lara](#), [S. Akiyama](#), [H. Xie](#)
18th International Astrophysics Conference, Pasadena, CA, February 18 to 22, 2019 2019
<https://arxiv.org/ftp/arxiv/papers/1907/1907.13318.pdf> File

Comparing Long-Duration Gamma-Ray Flares and High-Energy Solar Energetic Particles

G. A. [de Nolfo](#), [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevska](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)
ApJ 2019
<https://arxiv.org/pdf/1905.12878.pdf> File

HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE

Thesis Catalog (2010-2017)

[Allafort](#), A. J.
(2018). PhD thesis, Stanford Univ. File
https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf

Interplanetary Type II Radio Bursts from Wind/WAVES and Sustained Gamma-Ray Emission from Fermi/LAT: Evidence for Shock Source

Nat [Gopalswamy](#)¹, [Pertti Mäkelä](#)^{1,2}, [Seiji Yashiro](#)^{1,2}, [Alejandro Lara](#)^{1,2}, [Hong Xie](#)^{1,2}, [Sachiko Akiyama](#)^{1,2}, and [Robert J. MacDowall](#)¹
2018 ApJL 868 L19
<http://iopscience.iop.org/article/10.3847/2041-8213/aaef36/pdf> File

Visibility and Origin of Compact Interplanetary Radio Type IV Bursts

Nasrin Talebpour [Sheshvan](#), [Silja Pohjolainen](#)
Solar Phys. 2018
<https://arxiv.org/pdf/1810.09208.pdf>

A time dependent relation between EUV solar flare light-curves from lines with differing formation temperatures

Edward M.B. [Thiemann](#), Francis G. Eparvier and Thomas N. Woods
J. Space Weather Space Clim. 2017, 7, A36
<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170050.pdf>
<https://arxiv.org/pdf/1703.02995.pdf>

Characteristics of Sustained >100 γ -ray Emission Associated with Solar Flares

G. H. **Share**, R. J. Murphy, A. K. Tolbert, B. R. Dennis, S. M. White, R. A. Schwartz, and A. J. Tylka
ApJ Supplement **2017**

http://www.astro.umd.edu/~share/publications/share_2017.pdf File

Origin of Radio Enhancements in Type II Bursts in the Outer Corona

Firas **Al-Hamadani**, Silja Pohjolainen, Eino Valtonen

Solar Physics September **2017**, 292:127

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1148-6.pdf>

Measurement of Solar Neutrons on 05 March 2012, Using a Fiber-Type Neutron Monitor Onboard the Attached Payload to the ISS

K. **Koga**, Y. Muraki, S. Masuda, S. Shibata, H. Matsumoto, H. Kawano

Solar Physics August **2017**, 292:115

Expanding and Contracting Coronal Loops as Evidence of Vortex Flows Induced by Solar Eruptions

J. **Dudík**, F. P. Zuccarello, G. Aulanier, **B. Schmieder**, **P. Démoulin**

ApJ **2017**

<https://arxiv.org/pdf/1706.04783.pdf>

Sunspots rotation and magnetic transients associated with flares in NOAA AR 11429

Jianchuan **Zheng**, Zhiliang Yang, Jianpeng Guo, Kaiming Guo, Hui Huang, Xuan Song, Weixing Wan
Research in Astronomy and Astrophysics (RAA) **2017**

<https://arxiv.org/pdf/1704.08018.pdf>

A time dependent relation between EUV solar flare light-curves from lines with differing formation temperatures

Edward M.B. **Thiemann**, Francis G. Eparvier, Thomas N. Woods

Journal of Space Weather and Space Climate **2017**

<https://arxiv.org/pdf/1703.02995.pdf>

Decimetric and metric digital solar radio spectrometers of the Yunnan Astronomical Observatories and the first-light results

G. **Gao**, M. Wanga, L. Donga, N. Wu, J. Lin

New Astron. Volume 30, July **2014**, Pages 68–78

<http://www.sciencedirect.com/science/article/pii/S1384107614000153>

Interplanetary Type IV Bursts

Alexander **Hillaris**, Constantine Bouratzis, Alexander Nindos

Solar Physics **2016**

<http://arxiv.org/pdf/1604.07677v1.pdf> File

Multiwavelength study of twenty jets emanating from the periphery of active regions

Sargam M. **Mulay**, Durgesh Tripathi, Giulio Del Zanna, Helen Mason

A&A **2016**

USING MULTIPLE-VIEWPOINT OBSERVATIONS TO DETERMINE THE INTERACTION OF THREE CORONAL MASS EJECTIONS OBSERVED ON 2012 MARCH 5

Robin C. **Colaninno**¹ and Angelos Vourlidas

2015 ApJ 815 70

Results of a Measurement of Solar Neutrons Emitted on March 5, 2012 using a Fiber-type neutron monitor onboard the SEDA-AP attached to the ISS

K. **Koga**, H. Matsumoto, [O. Okudaira](#), [T. Goka](#), [T. Obara](#), [S. Masuda](#), [Y. Muraki](#), [S. Shibata](#), [T. Yamamoto](#)

Proceeding of the 34th International Cosmic Ray Conference in Hague in August, 2015, **2015**
<http://arxiv.org/ftp/arxiv/papers/1508/1508.04927.pdf>

How Common are Hot Magnetic Flux Ropes in the Low Solar Corona? A Statistical Study of EUV Observations

A. **Nindos**, S. Patsourakos, A. Vourlidas, C. Tagikas

ApJ **2015**

<http://arxiv.org/pdf/1507.03766v1.pdf>

Observation of solar high energy gamma and X-ray emission and solar energetic particles

Alexei **Struminsky**, Weiqun Gan

24th European Cosmic Ray Symposium, Kiel, September 2014, **2015**

Tracking the CME-driven Shock Wave on 2012 March 5 and Radio Triangulation of Associated Radio Emission

J. **Magdalenic**¹, C. Marqué¹, V. Krupar², M. Mierla^{1,3}, A. N. Zhukov^{1,4}, L. Rodriguez¹, M. Maksimović⁵, and B. Cecconi

2014 ApJ 791 115

Connecting speeds, directions and arrival times of 22 coronal mass ejections from the Sun to 1 AU

C. **Möstl**, K. Amla, J. R. Hall, P. C. Liewer, E. M. De Jong, R. C. Colaninno, A. M. Veronig, T. Rollett, M. Temmer, V. Peinhart, J. A. Davies, N. Lugaz, Y. D. Liu, C.J. Farrugia, J. G. Luhmann, B. Vršnak, R. A. Harrison, A. B. Galvin

ApJ, **2014**

<http://arxiv.org/pdf/1404.3579v1.pdf>

The interplanetary causes of geomagnetic activity during the 7–17 March 2012 interval: a CAUSES II overview

Bruce T. **Tsurutani**^{1*}, Ezequiel Echer², Kazunari Shibata³, Olga P. Verkhoglyadova^{1,4}, Anthony J. Mannucci¹, Walter D. Gonzalez², Janet U. Kozyra⁵ and Martin Pätzold

J. Space Weather Space Clim. 4 (**2014**) A02

HIGH-ENERGY GAMMA-RAY EMISSION FROM SOLAR FLARES: SUMMARY OF FERMI LAT DETECTIONS AND ANALYSIS OF TWO M-CLASS FLARES

M. **Ackermann**², M. Ajello³, A. Albert⁴, A. Allafort^{5,1}, L. Baldini⁶, G. Barbiellini^{7,8}, D. Bastieri et al.

Fermi-LAT collaboration

E-print, April **2013**, File; ApJ

5-13 March

What Are the Causes of Super Activity of Solar Active Regions?

Suman K. **Dhakal**¹ and Jie Zhang¹

2024 ApJ 960 36

<https://iopscience.iop.org/article/10.3847/1538-4357/ad07d2/pdf>

MHD simulation of Solar Eruption from Active Region 11429 Driven by Photospheric Velocity Field

[Xinyi Wang](#), [Chaowei Jiang](#), [Xueshang Feng](#)

ApJ **2023**

<https://arxiv.org/pdf/2301.00144.pdf>

Why is a flare-rich active region CME-poor?

Lijuan [Liu](#), Yuming Wang, Jingxiu Wang, [Chenglong Shen](#), [Pinzhong Ye](#), [Rui Liu](#), [Jun Chen](#), [Quanhao Zhang](#), [S. Wang](#)

2016

<http://arxiv.org/pdf/1607.07531v1.pdf> File

Propagation of the 2012 March Coronal Mass Ejections from the Sun to Heliopause

Ying D. [Liu](#), John D. Richardson, Chi Wang, Janet G. Luhmann

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<http://arxiv.org/pdf/1405.6086v1.pdf>

5-6 March

The source and engine of coronal mass ejections

Review

Manolis K. [Georgoulis](#), [Alexander Nindos](#), and [Hongqi Zhang](#)

Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences v. 377 [Issue 2148](#) Article ID: 20180094 2019

<https://royalsocietypublishing.org/doi/pdf/10.1098/rsta.2018.0094>

6 March 00:36: M1.3 вспышка, **пересвет** на STEREO-B, $B=10*2/292=0,07$
01:46: M1.2 вспышка, **пересвет** на STEREO-B, $B=10*2/292=0,07$
04:06: M1.0 вспышка, **пересвет** на STEREO-B, $B=12*2/292=0,08$
07:51: M1.0 вспышка, **пересвет** на STEREO-B, $B=6*2/292=0,04$
12:46: M1.2 вспышка, **пересвет** на STEREO-B, $B=11*2/292=0,08$
21:11: M1.3 вспышка, **пересвет** на STEREO-B, $B=11*2/292=0,08$

6 March

On orbit performance of the solar flare trigger for the Hinode EUV Imaging Spectrometer

[David H. Brooks](#), [Jeffrey W. Reep](#), [Ignacio Ugarte-Urra](#), [Harry P. Warren](#)

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<https://arxiv.org/pdf/2303.13155.pdf>

Magnetic Imprints of Eruptive and Noneruptive Solar Flares as Observed by Solar Dynamics Observatory

N. [Vasantharaju](#)^{1,2}, P. Vemareddy¹, B. Ravindra¹, and V. H. Doddamani³

2022 ApJ 927 86

<https://iopscience.iop.org/article/10.3847/1538-4357/ac4d8c/pdf>

Global energetics of solar flares. XIII. The Neupert effect and acceleration of coronal mass ejections

[Markus J. Aschwanden](#)

ApJ 2021

<https://arxiv.org/pdf/2112.07759.pdf> File

Case study on the identification and classification of small-scale flow patterns in flaring active region

E. [Philishvili](#)^{1,2}, B. M. Shergelashvili^{3,2,4}, S. Buitendag⁵, J. Raes¹, S. Poedts^{1,6} and M. L. Khodachenko^{3,7,8}

A&A 645, A52 (2021)

<https://arxiv.org/pdf/2011.07634.pdf>

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Differential Emission Measure Evolution as a Precursor of Solar Flares

C. [Gontikakis](#) (1), [I. Kontogiannis](#) (2), [M.K. Georgoulis](#) (1,3), [C. Guennou](#) (4), [P. Syntelis](#) (5), [S.H. Park](#) (6), [E. Buchlin](#)
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Magnetic Flux of Active Regions Determining the Eruptive Character of Large Solar Flares

Ting [Li](#), [Yijun Hou](#), [Shuhong Yang](#), [Jun Zhang](#), [Lijuan Liu](#), [Astrid M. Veronig](#)
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<https://arxiv.org/pdf/2007.08127.pdf>

Coronal dimmings associated with coronal mass ejections on the solar limb

Galina [Chikunova](#), [Karin Dissauer](#), [Tatiana Podladchikova](#), [Astrid M. Veronig](#)
ApJ 2020
<https://arxiv.org/pdf/2005.03348.pdf> File

A Study of Pre-Flare Solar Coronal Magnetic Fields: Magnetic Flux Ropes

Aiyang [Duan](#), [Chaowei Jiang](#), [Wen He](#), [Xueshang Feng](#), [Peng Zou](#), [Jun Cui](#)
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<https://arxiv.org/pdf/1908.08643.pdf>

Transient Inverse-FIP Plasma Composition Evolution within a Confined Solar Flare

Deborah [Baker](#), [Lidia van Driel-Gesztelyi](#), [David H. Brooks](#), [Gherardo Valori](#), [Alexander W. James](#), [J. Martin Laming](#), [David M. Long](#), [Pascal Demoulin](#), [Lucie M. Green](#), [Sarah A. Matthews](#), [Katalin Olah](#), [Zsolt Kovari](#)
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Lyman Continuum Observations of Solar Flares Using SDO/EVE

Marcos E. [Machado](#), [Ryan O. Milligan](#), [Paulo J. A. Simoes](#)
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<https://arxiv.org/pdf/1810.10824.pdf>

Evaluation of Applicability of a Flare Trigger Model based on Comparison of Geometric Structures

Yumi [Bamba](#), [Kanya Kusano](#)
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<https://arxiv.org/pdf/1802.00134.pdf>

The direct relation between the duration of magnetic reconnection and the evolution of GOES light curves in solar flares

Jeffrey W [Reep](#), [Shin Toriumi](#)
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<https://arxiv.org/pdf/1711.00422.pdf>

Automatic detection of white-light flare kernels in SDO/HMI intensitygrams

L. [Mravcova](#) (1), M. Svanda
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<https://arxiv.org/pdf/1706.00988.pdf>

Spectral Trends of Solar Bursts at Sub-THz Frequencies

L. O. T. [Fernandes](#), P. Kaufmann, E. Correia, C. G. Giménez de Castro, A. S. Kudaka, A. Marun, P. Pereyra, J.-P. Raulin, A. B. M. Valio
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Quasi-oscillatory dynamics observed in ascending phase of the flare on March 6, 2012.

Philishvili^{1,2}, B.M. Shergelashvili^{3,2,5}, T.V. Zaqarashvili^{4,2}, V. Kukhianidze², G. Ramishvili², M. Khodachenko^{3,6}, S. Poedts¹, P. De Causmaecker
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The nonpotentiality of coronae of solar active regions, the dynamics of the surface magnetic field, and the potential for large flares

C.J. **Schrijver**
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<http://arxiv.org/pdf/1602.07244v1.pdf>

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Markus J. **Aschwanden**, Yan Xu, and Ju Jing
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http://www.lmsal.com/~aschwand/eprints/2014_global1.pdf

Polarization Emission of Millimeter Activity at the Sun (POEMAS): New Circular Polarization Solar Telescopes at Two Millimeter Wavelength Ranges

Adriana **Valio**, P. Kaufmann, C. G. Giménez de Castro, J.-P. Raulin, L. O. T. Fernandes, A. Marun
Solar Physics, April 2013, Volume 283, Issue 2, pp 651-665

THE RELATIONSHIP BETWEEN THE SUDDEN CHANGE OF THE LORENTZ FORCE AND THE MAGNITUDE OF ASSOCIATED FLARES

Shuo **Wang**, Chang Liu, and Haimin Wang
2012 ApJ 757 L5

6-7 March

Deep Flare Net (DeFN) model for solar flare prediction

Naoto Nishizuka, **Komei Sugiura**, **Yuki Kubo**, **Mitsue Den**, **Mamoru Ishii**
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<https://arxiv.org/pdf/1805.03421.pdf>

The causes of quasi-homologous CMEs

Lijuan **Liu**, Yuming Wang, Rui Liu, Zhenjun Zhou, M. Temmer, J. K. Thalmann, Jiajia Liu, Kai Liu, Chenglong Shen, Quanhao Zhang, A. M. Veronig
2017
<https://arxiv.org/pdf/1706.08878.pdf>

6-11 March

The characteristics of flare- and CME-productive solar active regions

Review

[Ioannis Kontogiannis](#)

Advances in Space Research 2022

<https://arxiv.org/pdf/2210.05453.pdf>

Comparative case study of two methods to assess the eruptive potential of selected active regions

[Francesca Zuccarello](#)¹, [Iliaria Ermolli](#), [Marianna B. Korsos](#), [Fabrizio Giorgi](#), [Salvo L. Guglielmino](#), [Robertus Erdelyi](#), [Paolo Romano](#)

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Detailed analysis of dynamic evolution of three Active Regions before flare and CME occurrence at the photospheric level

Yudong Ye, [M. B. Korsos](#), [R. Erdelyi](#)

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Electric-Current Neutralization, Magnetic Shear, and Eruptive Activity in Solar Active Regions

Yang Liu, [Xudong Sun](#), [Tibor Török](#), [Viacheslav S. Titov](#), [James E. Leake](#)

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7 March – FD~3%, GMS Dst ~-83 nT

7 March – 00:16 – X5.4 **непечвет** $B=118*2/292=0,81$ $\leftarrow 16s$ $8s \rightarrow$ **00:26** $B=97*2/292=0,664$

7 March - the region 11429 [N17E28] has produced 2 X flares: **X5.4/3B** (associated with a **fast, wide halo CME**) at 00:24 and X1.3 at 01:14 (associated with a fast, but still significantly slower CME than the one observed less than an hour before) UTC. The latter X flare occurred in the western part of the magnetic delta structure while the X5 event was near the center of the inversion line. **Prolonged gamma**

The radiation storm is intensifying with the above 10 MeV proton flux currently above **1700 pfu**.

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Peter R. Young
ApJ 2024
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ПРОСТРАНСТВЕННЫЕ И ВРЕМЕННЫЕ ОСОБЕННОСТИ ПОВЕДЕНИЯ МИКРОВОЛНОВОГО И УЛЬТРАФИОЛЕТОВОГО ИЗЛУЧЕНИЯ В ЭРУПТИВНЫХ СОБЫТИЯХ

БАКУНИНА И.А.¹, МЕЛЬНИКОВ В.Ф.², ШАИН А.В.², АБРАМОВ-МАКСИМОВ В.Е.², ОРГАЧЕВ А.С.³

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Energetic Proton Back-Precipitation onto the Solar Atmosphere in Relation to Long-Duration Gamma-Ray Flares

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Interplanetary Type II Radio Bursts from Wind/WAVES and Sustained Gamma-Ray Emission from Fermi/LAT: Evidence for Shock Source

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Statistics of coronal dimmings associated with coronal mass ejections.

I. Characteristic dimming properties and flare association

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HIGH-ENERGY GAMMA-RAY EMISSION FROM SOLAR FLARES: SUMMARY OF FERMI LAT DETECTIONS AND ANALYSIS OF TWO M-CLASS FLARES

M. [Ackermann](#)², M. Ajello³, A. Albert⁴, A. Allafort^{5,1}, L. Baldini⁶, G. Barbiellini^{7,8}, D. Bastieri et al.
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CHROMOSPHERIC EVAPORATION IN AN M1.8 FLARE OBSERVED BY THE EXTREME-ULTRAVIOLET IMAGING SPECTROMETER ON HINODE

G. A. [Doschek](#)¹, H. P. Warren¹, and P. R. Young

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Energetic Particle and Other Space Weather Events of Solar Cycle 24

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E-print, Jan 2013, File; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, 2012

10 March – 16:16: C8.0 **пересвет** $A=23*2/315=0,15$ $\leftarrow 16s$ $8s \rightarrow A=23/315=0.073$
прилиб

18:16: M8.4 **пересвет** $A=39*2/315=0,25$ $\leftarrow 16s$ $8s \rightarrow$ **17:40** $A=38*2/315=0,241$

10 March - AR 11430 produced a **long duration C8.0 event** peaking at **15:52 UTC**. The event and the associated **CME** appears to have triggered the major **M8.4 long duration event** peaking at **17:44 UTC** in AR 11429 (N17W23). An impressive **CME** was observed in

STEREO imagery after the M8 event. Западная вспышка с относительно слабым микроволновым всплеском (8.8 GHz ~540 sfu) и, соответственно, без протонов. Prolonged gamma

A Double-decker Flux Rope Model for the Solar Eruption on 2012 March 10

Nishu [Karna](#)¹, Suman Dhaka², Antonia Savcheva³, Jie Zhang², and Bernhard Kliem⁴
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Dynamic Evolution of Magnetic Flux Ropes in Active Region 11429. I. EUV Observations

Yin [Zhang](#)^{5,1}, Jihong Liu², Baolin Tan^{1,3}, Xiaoshuai Zhu⁴, and Yihua Yan^{3,4}
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Multiwavelength Observations of the Formation and Eruption of a Complex Filament

Y. [Zhang](#)^{1,2}, T. S. Bastian², J. H. Liu³, S. J. Yu⁴, S. Feng⁵, J. Chen¹, and Y. H. Yan^{1,6}
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Radio Spectral Imaging of an M8.4 Eruptive Solar Flare: Possible Evidence of a Termination Shock

[Yingjie Luo](#) (1), [Bin Chen](#) (1), [Sijie Yu](#) (1), [Timothy S. Bastian](#) (2), [Samuel Krucker](#) (3)
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Recurring Homologous Solar Eruptions in NOAA AR 11429

[Suman K. Dhakal](#), [Jie Zhang](#), [Panditi Vemareddy](#), [Nishu Karna](#)

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On the Shock Source of Sustained Gamma-Ray Emission from the Sun

N [Gopalswamy](#), [P. Makela](#), [S. Yashiro](#), [A. Lara](#), [S. Akiyama](#), [H. Xie](#)

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Interplanetary Type II Radio Bursts from Wind/WAVES and Sustained Gamma-Ray Emission from Fermi/LAT: Evidence for Shock Source

Nat **Gopalswamy**¹, Pertti Mäkelä^{1,2}, Seiji Yashiro^{1,2}, Alejandro Lara^{1,2}, Hong Xie^{1,2}, Sachiko Akiyama^{1,2}, and Robert J. MacDowall¹
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Statistics of coronal dimmings associated with coronal mass ejections.

I. Characteristic dimming properties and flare association

Karin **Dissauer**, [Astrid M. Veronig](#), [Manuela Temmer](#), [Tatiana Podladchikova](#), [Kamalam Vanninathan](#)
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A Study of a Compound Solar Eruption with Two Consecutive Erupting Magnetic Structures

Suman K. **Dhakal**¹, Georgios Chintzoglou^{2,3}, and Jie Zhang¹
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N. P. Savani,^{1,2} A. Vourlidas,³ I. G. Richardson,^{4,2} A. Szabo,² B. J. Thompson,² A. Pulkkinen,² M. L. Mays,^{5,2} T. Nieves-Chinchilla,^{5,2} V. Bothmer⁶

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Predicting the magnetic vectors within coronal mass ejections arriving at Earth

1. Initial architecture

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Type II and Type III Radio Bursts and their Correlation with Solar Energetic Proton Events

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Connecting speeds, directions and arrival times of 22 coronal mass ejections from the Sun to 1 AU

C. Möstl, K. Amla, J. R. Hall, P. C. Liewer, E. M. De Jong, R. C. Colaninno, A. M. Veronig, T. Rollett, M. Temmer, V. Peinhart, J. A. Davies, N. Lugaz, Y. D. Liu, C.J. Farrugia, J. G. Luhmann, B. Vršnak, R. A. Harrison, A. B. Galvin

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Cosmic ray solar modulation and Forbush decrease analyses based on atmospheric neutron spectrometry at mountain altitude and GEANT4 simulations of extensive air showers

A. Cheminet^{1,2}, G. Hubert^{1,*}, V. Lacoste², D. Maurin³, L. Derome

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The interplanetary causes of geomagnetic activity during the 7–17 March 2012 interval: a CAUSES II overview

Bruce T. Tsurutani^{1*}, Ezequiel Echer², Kazunari Shibata³, Olga P. Verkhoglyadova^{1,4}, Anthony J. Mannucci¹, Walter D. Gonzalez², Janet U. Kozyra⁵ and Martin Pätzold

J. Space Weather Space Clim. 4 (2014) A02

Understanding shock dynamics in the inner heliosphere with modeling and type ii radio data: a statistical study[†]

H. Xie, O. C. St. Cyr, N. Gopalswamy, D. Odstrcil, H. Cremades

JGR, 2013, File

HIGH-ENERGY GAMMA-RAY EMISSION FROM SOLAR FLARES: SUMMARY OF FERMI LAT DETECTIONS AND ANALYSIS OF TWO M-CLASS FLARES

M. **Ackermann**², M. Ajello³, A. Albert⁴, A. Allafort^{5,1}, L. Baldini⁶, G. Barbiellini^{7,8}, D. Bastieri et al.
Fermi-LAT collaboration

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11 March

THE MAJOR GEOEFFECTIVE SOLAR ERUPTIONS OF 2012 MARCH 7: COMPREHENSIVE SUN-TO-EARTH ANALYSIS

S. **Patsourakos**¹, M. K. Georgoulis², A. Vourlidas³, A. Nindos¹,

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Coronal cavities: observations and implications for the magnetic environment of prominences

Sarah E. **Gibson**

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Properties of Flare-Imminent versus Flare-Quiet Active Regions from the Chromosphere through the Corona I: Introduction of the AIA Active Region Patches (AARPs)

[Karin Dissauer](#), [KD Leka](#), [Eric L. Wagner](#)

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EUV imaging and spectroscopy for improved space weather forecasting **Review**

Leon **Golub**^{1*}, Peter Cheimets¹, Edward E. DeLuca¹, Chad A. Madsen¹, Katharine K. Reeves¹, Jenna Samra¹, Sabrina Savage², Amy Winebarger² and Alexander R. Brucoleri³

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Connecting 3D evolution of Coronal Mass Ejections to their Source Regions

[Satabdwa Majumdar](#), [Vaibhav Pant](#), [Ritesh Patel](#), [Dipankar Banerjee](#)

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Microwave radio emissions as a proxy for coronal mass ejection speed in arrival predictions of interplanetary coronal mass ejections at 1 AU

Carolina Salas **Matamoros**^{1,2*}, Karl Ludwig Klein¹ and Gerard Trottet

J. Space Weather Space Clim., 7, A2 (2017)

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Forbush Decreases during the DeepMin and MiniMax of Solar Cycle 24

D. Lingri, H. Mavromichalaki, A. Belov, E. Eroshenko, V. Yanke, A. Abunin, M. Abunina
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The radial speed-expansion speed relation for Earth-directed CMEs

P. **Mäkelä**, N. Gopalswamy, S. Yashiro

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N. **Gopalswamy**¹, S. Yashiro^{1,2}, and S. Akiyama

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Magnetic Structure and Dynamics of the Erupting Solar Polar Crown Prominence on 2012 March 12

Yingna **Su**, Adriaan van Ballegooijen, Patrick I. McCauley, Haisheng Ji, Katharine K. Reeves, Edward E. DeLuca

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The dynamics of eruptive prominences **Review**

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12-14 March

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

Savani, N. P.; Vourlidas, A.; Szabo, A.; Mays, M. L.; Thompson, B. J.; Richardson, I. G.; Evans, R.; Pulkkinen, A.; Nieves-Chinchilla, T.

Space Weather Journal, Jan 2015, **File**

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Observations of CMEs and Models of the Eruptive Corona **Review**

N. **Gopalswamy**

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12-20 March

On the non-Kolmogorov nature of flare-productive solar active regions

Revati S. **Mandage**, R.T. James McAteer

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13 March – 17:35: M7.9 вспышка, **пересвет** на STEREO-A, $A=33 \cdot 2/313=0,21$

В 17:45 пересвет становится многоэлементным

13 March - Region 11429 [N18W66] major long duration M7.9 event peaking at 17:41 UTC. Strong microwave burst (8.8 GHz ~5000 sfu) .

The latter event was associated with a significant radiation storm and strong type II and IV radio bursts. A fast and wide halo CME was observed as well.

Unveiling the Journey of a Highly Inclined CME: Insights from the March 13, 2012 Event with 110° Longitudinal Separation

F. Carcaboso, M. Dumbovic, C. Kay, D. Lario, L. K. Jian, L. B. Wilson III, R. Gómez-Herrero, M. Temmer, S. G. Heinemann, T. Nieves-Chinchilla, A. M. Veronig

A&A 2024

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Deciphering The Slow-rise Precursor of a Major Coronal Mass Ejection

X. Cheng, **C. Xing**, **G. Aulanier**, **S. K. Solanki**, **H. Peter**, **M. D. Ding**

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Relationship between solar energetic particle intensities and coronal mass ejection kinematics using STEREO/SECCHI field of view

Anitha **Ravishankar** and Grzegorz Michalek

A&A 646, A142 (2021)

<https://www.aanda.org/articles/aa/pdf/2021/02/aa39537-20.pdf>

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A new trigger mechanism for coronal mass ejections: the role of confined flares and photospheric motions in the formation of hot flux ropes

[Alexander W James](#), [Lucie M Green](#), [Lidia van Driel-Gesztelyi](#), [Gherardo Valori](#)

A&A 2020

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Small Size Ground Level Enhancements During Solar Cycle 24

Leonty I. **Miroshnichenko**, [Chuan Li](#) & [Victor G. Yanke](#)

Solar Physics volume 295, Article number: 102 (2020)

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On the Relation between Flare and CME during GLE-SEP and Non-GLE-SEP Events

K. A. **Firoz**^{1,2}, W. Q. Gan², Y.-J. Moon¹, J. Rodríguez-Pacheco³, and Y. P. Li²

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<https://doi.org/10.3847/1538-4357/ab3c4e>

<https://sci-hub.ru/10.3847/1538-4357/ab3c4e>

<https://iopscience.iop.org/article/10.3847/1538-4357/ab3c4e/pdf>

New Evidence for Third Harmonic Electromagnetic Radiation in Interplanetary Type III Solar Radio Bursts

M. J. **Reiner**, [R. J. MacDowall](#)

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Frequency rising sub-THz emission from solar flare ribbons

E.P. **Kontar**, [G.G. Motorina](#), [N.L.S. Jeffrey](#), [Y.T. Tsap](#), [G.D. Fleishman](#), [A.V. Stepanov](#)

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Relationship between Intensity of White-light Flares and Proton Flux of Solar Energetic Particles

Nengyi **Huang**^{1,2}, Yan Xu^{1,2}, and Haimin Wang

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Stephen W. **Kahler**, Alan G. Ling

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Solar Activity from 2006 to 2014 and Short-term Forecasts of Solar Proton Events Using the ESPERTA Model

T. **Alberti**¹, M. Laurenza², E. W. Cliver³, M. Storini², G. Consolini², and F. Lepreti

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Solar Energetic Particle Events with Protons Above 500 MeV Between 1995 and 2015 Measured with SOHO/EPHIN

P. **Kühl**, N. Dresing, B. Heber, A. Klassen
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Possible ground level enhancements at the beginning of the maximum of Solar Cycle 24.

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Anthony P. **Rasca**^{1,3,4}, James Chen^{1,4}, and Alexei A. Pevtsov
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Analysis of intermittency in submillimeter radio and Hard X-Rays during the impulsive phase of a solar flare

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Origin of the 30 THz emission detected during the 2012 March 13 solar flare at 17:20 UT

G. **Trottet**, J.-P. Raulin, A. MacKinnon, [G. Giménez de Castro](#), [P.J.A. Simões](#), [D. Cabezas](#), [V. de La Luz](#), [M. Luoni](#), [P. Kaufmann](#)
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How Common are Hot Magnetic Flux Ropes in the Low Solar Corona? A Statistical Study of EUV Observations

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Interplanetary particle transport simulation for warning system for aviation exposure to solar energetic particles

Yûki **Kubo**, Ryuho Kataoka, Tatsuhiko Sato
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Proton activity of the Sun in current solar cycle 24

Chuan **Li**, Leonty Miroshnichenko, Cheng Fang
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<http://arxiv.org/pdf/1408.2308v1.pdf>

Особенности субгерагерцового излучения солнечных вспышек

В.С. **Махмутов**, Г.А. Базилевская, Ю.И. Стожков, А.А. Квашнин
ИКИ-2014, Сессия: Солнце
<http://plasma2014.cosmos.ru/presentations>

Cosmic ray solar modulation and Forbush decrease analyses based on atmospheric neutron spectrometry at mountain altitude and GEANT4 simulations of extensive air showers

A. **Cheminet**^{1,2}, G. Hubert^{1,*}, V. Lacoste², D. Maurin³, L. Derome
JGR, Volume 118, Issue 12, pages 7488–7496, December **2013**

The interplanetary causes of geomagnetic activity during the 7–17 March 2012 interval: a CAUSES II overview

Bruce T. **Tsurutani**^{1*}, Ezequiel Echer², Kazunari Shibata³, Olga P. Verkhoglyadova^{1,4}, Anthony J. Mannucci¹, Walter D. Gonzalez², Janet U. Kozyra⁵ and Martin Pätzold
J. Space Weather Space Clim. 4 (**2014**) A02

Case Study of a Magnetic Transient in NOAA 11429 Observed by SDO/HMI during the M7.9 Flare on 2012 March 13

Brian J. **Harker** and Alexei A. Pevtsov
2013 ApJ 778 175

Understanding shock dynamics in the inner heliosphere with modeling and type ii radio data: a statistical study†

H. **Xie**, O. C. St. Cyr, N. Gopalswamy, D. Odstrcil, H. Cremades
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СОЛНЕЧНЫЕ ПРОТОННЫЕ СОБЫТИЯ В КОНЦЕ 23-ГО И НАЧАЛЕ 24-ГО СОЛНЕЧНЫХ ЦИКЛОВ, ЗАРЕГИСТРИРОВАННЫЕ В ЭКСПЕРИМЕНТЕ ПАМЕЛА

Базилевская Г.А., Майоров А.Г., Малахов В.В., Михайлов В.В., Адриани О., Барбарин Д.С., Белотти Р., Боецио М., Богомолов Э.А., Бонвичини В., Бонджи М., Бонеки Л., Борисов С.В., Боттаи С., Бруно А., Вакки А., Вануччини Е., Васильев Г.И., Воронов С.А., Ву Ю. и др.
Известия РАН, Серия физическая, том 77, № 5, с. 557–560, **2013**.

A BRIGHT IMPULSIVE SOLAR BURST DETECTED AT 30 THz

P. **Kaufmann**^{1,2,8}, S. M. White³, S. L. Freeland⁴, R. Marcon^{5,6}, L. O. T. Fernandes¹, A. S. Kudaka¹, R. V. de Souza¹, J. L. Aballay⁷, G. Fernandez⁷, R. Godoy⁷, A. Marun⁷, A. Valio¹, J.-P. Raulin¹, and C. G. Giménez de Castro
2013 ApJ 768 134; preprint File

Polarization Emission of Millimeter Activity at the Sun (POEMAS): New Circular Polarization Solar Telescopes at Two Millimeter Wavelength Ranges

Adriana **Valio**, P. Kaufmann, C. G. Giménez de Castro, J.-P. Raulin, L. O. T. Fernandes, A. Marun
Solar Physics, April **2013**, Volume 283, Issue 2, pp 651-665

THE FIRST GROUND LEVEL ENHANCEMENT EVENT OF SOLAR CYCLE 24: DIRECT OBSERVATION OF SHOCK FORMATION AND PARTICLE RELEASE HEIGHTS

N. [Gopalswamy](#)¹, H. Xie^{1,2}, S. Akiyama^{1,2}, S. Yashiro^{1,2}, I. G. Usoskin³, and J. M. Davila
2013 ApJ 765 L30, preprint [File](#)

Solar energetic particle events in 2006-2012 in the PAMELA experiment data

G A [Bazilevskaya](#) et al

2013 J. Phys.: Conf. Ser. 409 012188

Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. [Gopalswamy](#)

E-print, Jan 2013, [File](#); In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, 2012

14 March – AR 11432 [N15W00], impulsive Flare: M2.8/1N at 15:21 UTC. This flare occurred along the inversion line between the trailing spots of region. Слабое радио, нет протонов. Заметная эрупция. Узкий CME.

Solar Flare Irradiance: Observations and Physical Modeling

[Jeffrey W. Reep](#), [David E. Siskind](#), [Harry P. Warren](#)

ApJ 2021

<https://arxiv.org/pdf/2110.06310.pdf>

Plasma diagnostics of coronal dimming events

Kamalam [Vanninathan](#), [Astrid M. Veronig](#), [Karin Dissauer](#), [Manuela Temmer](#)

ApJ 2018

<https://arxiv.org/pdf/1802.06152.pdf>

On Critical Height of Torus Instability in Two-Ribbon Solar Flares

Dong [Wang](#), Rui Liu, Yuming Wang, Kai Liu, Jun Chen, Jiajia Liu, Zhenjun Zhou, Min Zhang

ApJL 2017

<https://arxiv.org/pdf/1706.03169.pdf>

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS.

I. THE CASE FOR BLAST WAVES

T. A. [Howard](#)¹ and V. J. Pizzo

2016 ApJ 824 92 [File](#)

The interplanetary causes of geomagnetic activity during the 7–17 March 2012 interval: a CAUSES II overview

Bruce T. [Tsurutani](#)^{1*}, Ezequiel Echer², Kazunari Shibata³, Olga P. Verkhoglyadova^{1,4}, Anthony J. Mannucci¹, Walter D. Gonzalez², Janet U. Kozyra⁵ and Martin Pätzold

J. Space Weather Space Clim. 4 (2014) A02

15 March – Regions 11432 (N14W03) again managed to produce an impulsive flare M1.8/1F at 07:52 UTC. This time a weak type II radio burst was associated with the event. A small и узкий, apparently Earth directed CME was observed in STEREO imagery.

15 March - GMS Dst ~-78 nT (от эрупции 13 марта?)

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

Unveiling the Journey of a Highly Inclined CME: Insights from the March 13, 2012 Event with 110° Longitudinal Separation

F. Carcaboso, M. Dumbovic, C. Kay, D. Lario, L. K. Jian, L. B. Wilson III, R. Gómez-Herrero, M. Temmer, S. G. Heinemann, T. Nieves-Chinchilla, A. M. Veronig
A&A 2024
<https://arxiv.org/pdf/2401.17501.pdf>

Deriving CME Density From Remote Sensing Data and Comparison to In-Situ Measurements

M. Temmer, L. Holzknicht, M. Dumbović, B. Vršnak, N. Sachdeva, S. G. Heinemann, K. Dissauer, C. Scolini, E. Asvestari, A. M. Veronig, S. J. Hofmeister
JGR Volume 126, Issue 1 January 2021 e2020JA028380
<https://doi.org/10.1029/2020JA028380>
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020JA028380>

Coronal Condensation in Funnel Prominences as Return Flows of the Chromosphere-Corona Mass Cycle

Liu, Wei; Berger, Thomas E.; and Low, B. C.
2014/01, Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 441-442
http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf

The interplanetary causes of geomagnetic activity during the 7–17 March 2012 interval: a CAUSES II overview

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J. Space Weather Space Clim. 4 (2014) A02

16 March

Spatial Distributions of Sunspot Oscillation Modes at Different Temperatures

Zhengkai Wang, Song Feng, Linhua Deng, Yao Meng
Research in Astronomy and Astrophysics 2019
<https://arxiv.org/pdf/1908.04906.pdf>

17 March – 20:46 – M1.3 вспышка; пересвет на STEREO-A, $A=16^*2/313=0,1$

17 March, 20:39 – Исключительно импульсная M1.3 вспышка, S20W25, II тип

Coronal Cavities in CoMP Observations

Agnieszka Rumińska^{1,2}, Urszula Bąk-Stęślicka¹, Sarah E. Gibson³, and Yuhong Fan³
2022 ApJ 926 146
<https://iopscience.iop.org/article/10.3847/1538-4357/ac469c/pdf>

Simulating the Coronal Evolution of AR 11437 using SDO/HMI Magnetograms

Stephanie L. Yardley, Duncan H. Mackay, Lucie M. Green
ApJ 2017
<https://arxiv.org/pdf/1712.00396.pdf>

Transient Mass Loss Analysis of Solar Observations using Stellar Methods

M. K. Crosley, R. A. Osten, C. Norman
2017
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CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. I. THE CASE FOR BLAST WAVES

T. A. Howard¹ and V. J. Pizzo

Coronal Condensation in Funnel Prominences as Return Flows of the Chromosphere-Corona Mass Cycle

[Liu](#), Wei; [Berger](#), Thomas E.; and [Low](#), B. C.

2014/01, Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 441-442

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17-20 March

Comparative Accuracies of Models for Drag Prediction During Geomagnetically Disturbed Periods: A First Principles Model Versus Empirical Models

[R. L. Walterscheid](#), [M. W. Chen](#), [C.-C. Chao](#), [S. Gegenheimer](#), [J. Cabrera-Guzman](#), [J. McVey](#)

Space Weather e2022SW003332 [Volume21, Issue5](#) 2023

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Simulating the Coronal Evolution of Bipolar Active Regions to Investigate the Formation of Flux Ropes

[Stephanie L. Yardley](#), [Duncan H. Mackay](#), [Lucie M. Green](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2012.07708.pdf>

The role of flux cancellation in eruptions from bipolar active regions

S. L. [Yardley](#), [L. M. Green](#), [L. Van Driel-Gesztelyi](#), [D. R. Williams](#), [D. H. Mackay](#)

ApJ 2018

<https://arxiv.org/pdf/1808.10635.pdf>

18 March – yrpo, A spectacular CME rocketed away from the sun's northwestern limb during the early hours of March 18th: movie. The probable source was old sunspot AR1429, still active as it transits the far side of the sun.

Association of calcium network bright points with underneath photospheric magnetic patches

Nancy [Narang](#), [Dipankar Banerjee](#), [Kalugodu Chandrashekar](#), [Vaibhav Pant](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1902.03764.pdf>

Are Halo-like Solar Coronal Mass Ejections Merely a Matter of Geometric Projection Effects?

Ryun-Young [Kwon](#), Jie Zhang, and Angelos Vourlidas

2015 ApJ 799 L29

http://spaceweather.gmu.edu/public/rkwon/manuscript_halo_CMEs/manuscript.pdf

Understanding shock dynamics in the inner heliosphere with modeling and type ii radio data: a statistical study[†]

H. [Xie](#), O. C. St. Cyr, N. Gopalswamy, D. Odstrcil, H. Cremades

JGR, 2013, File

20 March

Coronal Cavities in CoMP Observations

Agnieszka [Rumińska](#)^{1,2}, Urszula Bąk-Stęślicka¹, Sarah E. Gibson³, and Yuhong Fan³

2022 ApJ 926 146

<https://iopscience.iop.org/article/10.3847/1538-4357/ac469c/pdf>

Simulating the Coronal Evolution of AR 11437 using SDO/HMI Magnetograms

Stephanie L. [Yardley](#), [Duncan H. Mackay](#), [Lucie M. Green](#)

ApJ 2017

<https://arxiv.org/pdf/1712.00396.pdf>

21 March – A coronal mass ejection (CME) blasted away from the farside of the sun at 0740 UT. SOHO photographed the cloud expanding at 1550 km/s. The source of the CME is probably old sunspot AR1429, still active as it transits the farside.

Is There a Dynamic Difference between Stealthy and Standard Coronal Mass Ejections?

Beili [Ying](#)¹, Alessandro Bemporad^{2,1}, Li Feng^{1,3}, Nariaki V. Nitta⁴, and Weiqun Gan^{1,3}

2023 ApJ 942 3

<https://iopscience.iop.org/article/10.3847/1538-4357/aca52c/pdf>

The Source Locations of Major Flares and CMEs in the Emerging Active Regions

[Lijuan Liu](#), [Yuming Wang](#), [Zhenjun Zhou](#), [Jun Cui](#)

ApJ 2021

<https://arxiv.org/pdf/2101.07452.pdf>

A New Automatic Tool for CME Detection and Tracking with Machine Learning Techniques

Pengyu [Wang](#), [Yan Zhang](#), [Li Feng](#), [Hanqing Yuan](#), [Yuan Gan](#), [Shuting Li](#), [Lei Lu](#), [Beili Ying](#), [Weiqun Gan](#), [Hui Li](#)

ApJS 2019

<https://arxiv.org/pdf/1907.08798.pdf>

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

22 March

Onset of the Magnetic Explosion in Solar Coronal Jets in Quiet Regions on the Central Disk

[Navdeep K. Panesar](#), [Ronald L. Moore](#), [Alphonse C. Sterling](#)

ApJ 2020

<https://arxiv.org/pdf/2006.04253.pdf>

23 March – 19:46 – M1.0 вспышка; **пересвет** на STEREO-B, $B=7*2/295=0,05$ сомнительный

24 March

Simulating the Coronal Evolution of Bipolar Active Regions to Investigate the Formation of Flux Ropes

[Stephanie L. Yardley](#), [Duncan H. Mackay](#), [Lucie M. Green](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2012.07708.pdf>

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. [Howard](#)¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden

2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86

<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>
<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

Height of Shock Formation in the Solar Corona Inferred from Observations of Type II Radio Bursts and Coronal Mass Ejections

N. **Gopalswamy**, H. Xie, P. Makela, S. Yashiro, S. Akiyama, W. Uddin., A. K. Srivastava, N. C. Joshi, R. Chandra, P. K. Manoharan, K. Mahalakshmi, V. C. Dwivedi, R. Jain and A. K. Awasthi, N. V. Nitta, M. J. Aschwanden, D. P. Choudhary
E-print, Jan 2013; Adv. Space Res.

26 March

Solar Filaments and Interplanetary Magnetic Field Bz

V. **Aparna** and Petrus C. Martens

2020 ApJ 897 68

<https://doi.org/10.3847/1538-4357/ab908b>

<https://sci-hub.tw/10.3847/1538-4357/ab908b>

The initial morphologies of the wavefronts of extreme ultraviolet waves

Ruisheng **Zheng**, [Zhike Xue](#), [Yao Chen](#), [Bing Wang](#), [Hongqiang Song](#)

ApJL 2018

<https://arxiv.org/pdf/1812.08371.pdf>

March 27: A full halo CME was associated with a C5 event in region 11444 early in the day.

Dimensionality of Solar Magnetic Reconnection

Review

Jeongwoo **Lee**

Reviews of Modern Plasma Physics 2022

<https://link.springer.com/epdf/10.1007/s41614-022-00096-y>

<https://doi.org/10.1007/s41614-022-00096-y>

Formation of Isolated Radio Type II Bursts at Low Frequencies

[Silja Pohjolainen](#), [Nasrin Talebpour Sheshvan](#)

Solar Phys. 2021

<https://arxiv.org/pdf/2104.09891.pdf>

Evolution of the Toroidal Flux of CME Flux Ropes during Eruption

[C. Xing](#), [X. Cheng](#), [M. D. Ding](#)

The Innovation 2020

<https://arxiv.org/pdf/2011.10750.pdf>

An Automated Algorithm for Identifying and Tracking Transverse Waves in Solar Images

Micah J. **Weberg**, Richard J. Morton, and James A. McLaughlin

2018 ApJ 852 57

<http://sci-hub.tw/10.3847/1538-4357/aa9e4a>

Trigger of successive filament eruptions observed by SDO and STEREO

Sajal Kumar **Dhara**, Ravindra B., Pankaj Kumar, [Ravinder Kumar Banyal](#), [Shibu K. Mathew](#), [Bhuwan Joshi](#)

Solar Physics 2017

<https://arxiv.org/pdf/1706.07385.pdf>

SOLAR ERUPTION AND LOCAL MAGNETIC PARAMETERS

Jeongwoo **Lee**^{1,2}, Chang Liu³, Ju Jing³, and Jongchul Chae

2016 ApJL 831 L18 DOI [10.3847/2041-8205/831/2/L18](https://doi.org/10.3847/2041-8205/831/2/L18)

<http://sci-hub.cc/doi/10.3847/2041-8205/831/2/L18>

SOLAR MULTIPLE ERUPTIONS FROM A CONFINED MAGNETIC STRUCTURE

Jeongwoo [Lee](#)¹, Chang Liu², Ju Jing², and Jongchul Chae

2016 ApJ 829 L1 [File](#)

A global view of velocity fluctuations in the corona below 1.3 R_☉ with CoMP

R. J. [Morton](#), S. Tomczyk, R. F. Pinto

ApJ 2016

<http://arxiv.org/pdf/1608.01831v1.pdf>

Apparent Solar Tornado - Like Prominences

Olga [Panasenco](#), Sara F. Martin, Marco Velli

E-print, July 2013, Solar Phys. Volume 289, Issue 2, pp.603-622, 2014

<http://arxiv.org/pdf/1307.2303v1.pdf>

Observations of Coronal Mass Ejections with the Coronal Multichannel Polarimeter

H. Tian, S. Tomczyk, S. W. McIntosh, C. Bethge, G. de Toma, S. Gibson

E-print, March 2013, [File](#); Sol. Phys. (2013) 288:637–650

April

Solar Wind Data Assimilation in an Operational Context: Use of Near-Real-Time Data and the Forecast Value of an L5 Monitor

Harriet [Turner](#), [Matthew Lang](#), [Mathew Owens](#), [Andy Smith](#), [Pete Riley](#), [Mike Marsh](#), [Siegfried Gonzi](#)

Space Weather [Volume21, Issue5](#) e2023SW003457 2023

<https://doi.org/10.1029/2023SW003457>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2023SW003457>

April 2 – 02:20, A magnetic filament connected to sunspot AR1450 erupted hurling a faint CME in the direction of Earth.

3-6 Apr

NON-THERMAL RESPONSE OF THE CORONA TO THE MAGNETIC FLUX DISPERSAL IN THE PHOTOSPHERE OF A DECAYING ACTIVE REGION

L. K. Harra¹ and V. I. Abramenko

2012 ApJ 759 104

4 Apr

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

April 5: A CME associated with the C1 LDE in AR 11450 late in the day may have had Earth directed extensions.

Filament Eruptions Associated with Flares, Coronal Mass Ejections and Solar Energetic Particle Events

K. [Koleva](#)¹, P. Duchlev¹, M. Dechev¹, R. Miteva², K. Kozarev¹, A. Veronig³, M. Temmer³

Proceedings of Tenth Workshop “Solar Influences on the Magnetosphere, Ionosphere and Atmosphere” Primorsko, Bulgaria, June 4–8, 2018

http://ws-sozopol.stil.bas.bg/2018Primorsko/Kolevaetal_WS-10.pdf

The Relation Between Large-Scale Coronal Propagating Fronts and Type II Radio Bursts

Nariaki V. [Nitta](#), Wei Liu, Nat Gopalswamy, Seiji Yashiro

Solar Phys., 2014

http://www.lmsal.com/nitta/publ/SP_typeII_20140904.pdf

<http://arxiv.org/pdf/1409.4754v1.pdf> [File](#)

April 7: A filament eruption across AR 11451 was associated with a long duration B class event and a CME which may have been partially Earth directed.

Automated detection of coronal MASS ejecta origins for space weather Applications (ALMANAC)

[Thomas Williams](#), [Huw Morgan](#)

Space Weather 2022

<https://arxiv.org/pdf/2211.04405.pdf>

SDO/AIA OBSERVATIONS OF LARGE-AMPLITUDE LONGITUDINAL OSCILLATIONS IN A SOLAR FILAMENT

Ting [Li](#) and Jun Zhang

2012 ApJ 760 L10

April 8

Automated Detection of Accelerating Solar Eruptions using Parabolic Hough Transform

[Ritesh Patel](#), [Vaibhav Pant](#), [Priyanka Iyer](#), [Dipankar Banerjee](#), [Marilena Mierla](#), [Matthew J. West](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2010.14786.pdf>

April 9: a long duration C3.9 event peaking at 12:44 , A NW CME with an origin in AR 11451 just after noon appears to have been a full halo CME.

Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions

Ronald L. [Moore](#)^{1,2}, Navdeep K. Panesar^{3,4}, Alphonse C. Sterling², and Sanjiv K. Tiwari^{3,4}

2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

Evaluation of standoff distance method to determine the coronal magnetic field using CME-driven shocks

K. [Suresh](#), A. Shanmugaraju, M. Syed Ibrahim

Astrophysics and Space Science November 2016, 361:360

http://link.springer.com/article/10.1007/s10509-016-2944-4?wt_mc=alerts.TOCjournals

The Properties of Solar Energetic Particle Event-Associated Coronal Mass Ejections Reported in Different CME Catalogs

Ian G. [Richardson](#), Tycho T. von Roseninge, Hilary V. Cane

Solar Phys. 2015 File

<http://arxiv.org/pdf/1505.03071v1.pdf>

April 10-11

Possible Evidence for Alfvénic Turbulence in Coronal Loops

Ineke [De Moortel](#)

New UKSP Nugget: 48, June 2014

<http://www.uksolphys.org/uksp-nugget/48-possible-evidence-for-alfvenic-turbulence-in-coronal-loops/>

Potential Evidence for the Onset of Alfvénic Turbulence in Trans-equatorial Coronal Loops

I. [De Moortel](#)¹, S. W. McIntosh², J. Threlfall¹, C. Bethge³, and J. Liu

2014 ApJ 782 L34

April 12

Electric Currents through J-shaped and Non-J-shaped Flare Ribbons

[Yuwei He](#), [Rui Liu](#), [Lijuan Liu](#), [Jun Chen](#), [Wensi Wang](#), [Yuming Wang](#)
ApJ 2020
<https://arxiv.org/pdf/2007.05693.pdf>

April 13

Measuring magnetic field with Atacama Large Millimeter/Submillimeter Array **Review**

Maria [Loukitcheva](#)

Front. Astron. Space Sci. 7:45 2020

https://www.frontiersin.org/articles/10.3389/fspas.2020.00045/full?utm_source=F-AAE&utm_medium=EMLF&utm_campaign=MRK_1406443_76_Astron_20200818_arts_A
<https://doi.org/10.3389/fspas.2020.00045>

Measurements of Coronal and Chromospheric Magnetic Fields using Polarization Observations by the Nobeyama Radioheliograph

K. [Iwai](#) and K. Shibasaki

Publ. Astron. Soc. Japan 65, No SP1, S14 [7 pages] (2013)

<http://pasj.asj.or.jp/v65/sp1/65S014/65S014.pdf>

14 Apr

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. [Howard](#)¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden

2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86

<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>

<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

15 Apr

Evaluation of standoff distance method to determine the coronal magnetic field using CME-driven shocks

K. [Suresh](#), A. Shanmugaraju, M. Syed Ibrahim

Astrophysics and Space Science November 2016, 361:360

http://link.springer.com/article/10.1007/s10509-016-2944-4?wt_mc=alerts.TOCjournals

Statistical survey of widely spread out solar electron events observed with STEREO and ACE with special attention to anisotropies

N. [Dresing](#), R. Gomez-Herrero, B. Heber, A. Klassen, O. Malandraki, W. Dröge, and Y. Kartavykh

E-print, July 2014; A&A, Volume 567, A27, July 2014; File

Observations of coronal mass ejections (CMEs) at low frequency radio region on 15th April 2012.

[Hamidi](#), Z. S., Abidin, Z. Z., Ibrahim, Z. A., Shariff, N. N. M., & Monstein, C.

[AIP Conf. Proc.](#) 1528, 55 (2013)

sci-hub.se/10.1063/1.4803568

15-19 April

Plasma flows and magnetic field interplay during the formation of a pore

I. [Ermolli](#), A. Cristaldi, F. Giorgi, F. Giannattasio, M. Stangalini, P. Romano, A. Tritschler, F. Zuccarello

A&A 2017

<https://arxiv.org/pdf/1701.06440v1.pdf>

16 Apr – 18:16: M1.7 **пересвет** $B=21^{\circ}2/299=0,14 \leftarrow 16s \ 8s \rightarrow 18:01 \ B=15^{\circ}2/299=0.1$

April 16 – Magnetic fields on the sun's northeastern limb erupted around 17:45 UT on April 16th, producing one of the most visually-spectacular explosions in years. Квазиимпульсная M1.7 вспышка [N12E80], associated with a fast and wide partial halo CME. Похоже на эрупцию волокна, возможно, неполную.

The Lyman-alpha Emission in Solar Flares. I. a Statistical Study on Its Relationship with the 1--8 Å Soft X-ray Emission

Zhichen **Jing**, Wuqi Pan, Yukun Yang, Dechao Song, Jun Tian, Y. Li, X. Cheng, Jie Hong, M. D. Ding
ApJ 2020
<https://arxiv.org/pdf/2009.10358.pdf>

Statistical survey of widely spread out solar electron events observed with STEREO and ACE with special attention to anisotropies

N. **Dresing**, R. Gomez-Herrero, B. Heber, A. Klassen, O. Malandraki, W. Dröge, and Y. Kartavykh
E-print, July 2014; A&A, Volume 567, A27, July 2014; File

18 Apr **залимбовый пересвет** 02:16 ← 16s 8s → B=36/298=0.12 всё <0/2 **не берём**
02:26 B=22*2/298=0.15

17-22 Apr

Nature of helicity injection in non-erupting solar active regions

P. **Vemareddy**

MNRAS 2022

<https://arxiv.org/pdf/2208.03228>

April 18: A small CME associated with a C8 event in region 11463 could have had an Earth directed component.

April 19: >14 UT, крупная эрупция SE волокна; крупный CME, STEREO-B,A

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha **Sachdeva**

Ph.D. **Thesis** 2019

<https://arxiv.org/pdf/1907.12673.pdf>

Last news on zebra pattern

Gennady **Chernov**

Solar Phys. 2016

<http://arxiv.org/ftp/arxiv/papers/1512/1512.06311.pdf>

Transit time of CME/shock associated with four major geo-effective CMEs in solar cycle 24

M. Syed **Ibrahim**, A. Shanmugaraju, M. Benedict Lawrance

Advances in Space Research, Volume 55, Issue 1, 1 January 2015, Pages 407–415

<http://www.sciencedirect.com/science/article/pii/S0273117714006139>

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

Dynamics of flare processes and variety of the fine structure of solar radio emission over a wide frequency range of 30 - 7000 MHz

Gennady **Chernov**, Valery Fomichev, Baolin Tan, Yihua Yan, Chengming Tan, Qijun Fu

Solar Phys., 2014

<http://arxiv.org/pdf/1409.0660v1.pdf>

Connecting speeds, directions and arrival times of 22 coronal mass ejections from the Sun to 1 AU

C. [Möstl](#), K. Amla, J. R. Hall, P. C. Liewer, E. M. De Jong, R. C. Colaninno, A. M. Veronig, T. Rollett, M. Temmer, V. Peinhart, J. A. Davies, N. Lugaz, Y. D. Liu, C.J. Farrugia, J. G. Luhmann, B. Vršnak, R. A. Harrison, A. B. Galvin

ApJ, 2014

<http://arxiv.org/pdf/1404.3579v1.pdf>

19-25 Apr

Magnetic helicity and energy of emerging solar active regions and their eruptivity

E. [Liokati](#) (1), [A. Nindos](#) (1), [Y. Liu](#) (2)

A&A 2022

<https://arxiv.org/pdf/2202.04353.pdf>

April 20

Predicting the Time-of-Arrival of Coronal Mass Ejections at Earth From Heliospheric Imaging Observations

Carlos Roberto [Braga](#), [Angelos Vourlidas](#), [Guillermo Stenborg](#), [Alisson Dal Lago](#), [Rafael Rodrigues Souza de Mendonça](#), [Ezequiel Echer](#)

JGR 2020

<https://arxiv.org/pdf/2008.09005.pdf>

A New Space Weather Tool for Identifying Eruptive Active Regions

P. [Pagano](#), [D. H. Mackay](#), [S. L. Yardley](#)

ApJ 2019

<https://arxiv.org/pdf/1910.04226.pdf>

The quasi-periodic behavior of recurrent jets caused by emerging magnetic flux

H. D. [Li](#) , Y. C. Jiang, J. Y. Yang, Y. Bi,

Astrophysics and Space Science October 2015, 359:44

April 22

Partially Erupted Prominence Material as a Diagnostic of Coronal Mass Ejection Trajectory

[B. A. Hovis-Afflerbach](#), [B. J. Thompson](#), [E. I. Mason](#)

Space Weather [Volume21, Issue8](#) August 2023 e2022SW003256

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2022SW003256>

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia [Alzate](#) and Huw Morgan

2017 ApJ 840 103

<http://sci-hub.cc/10.3847/1538-4357/aa6caa>

DETERMINING HEATING TIME SCALES IN SOLAR ACTIVE REGION CORES FROM AIA/SDO FE XVIII IMAGES

IGNACIO [UGARTE-URRA](#)¹ AND HARRY P. WARREN²

eprint arXiv:1311.6346, ApJ, 2014

<http://arxiv.org/abs/1311.6346>

April 23: Region S1598 (to the west of AR 11461) was the source of a C2 flare at 17:51 UTC. A CME was associated with this event. LASCO images indicate a full halo, however, NASA analysis of all available imagery indicates there were two sources for this apparent full halo CME. The CME associated with the C2 event was observed over most of the southern hemisphere limbs as a partial halo CME. It is uncertain if this CME will reach Earth.

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

Advances in Observing Various Coronal EUV Waves in the SDO Era and Their Seismological Applications (Invited Review)

Wei **Liu**, Leon Ofman

E-print, April 2014; Solar Physics (Topical Issue, "Exploring the Network of SDO Science")

http://sun.stanford.edu/~weiliu/research/publications/2014/2014SolPhy_Liu_Ofman_SDO-EUV-wave-review.pdf

Diffraction, Refraction, and Reflection of An Extreme-Ultraviolet Wave Observed during Its Interactions with Remote Active Regions

Shen, Yuandeng; Liu, Yu; Su, Jiangtao; Li, Hui; Zhao, Ruijuan; Tian, Zhanjun; Ichimoto, Kiyoshi; Shibata, Kazunari

E-print, July 2013, **File**; ApJL

April 23-24: INTENSIFYING GEOMAGNETIC STORM от эрупции 19-ого, Dst~-102 ?

On April 23. Solar wind speed at SOHO ranged between 324 and 413 km/s. A solar wind shock was observed at SOHO at 02:29 UTC, its source was likely one of the CMEs observed on April 19. Initially the disturbance appeared to be weak to moderate, however, after 17h UTC the interplanetary magnetic field has been consistently strongly southwards. This has caused a strong geomagnetic storm. During the 00-03h UTC interval on April 24 the planetary A index reached 156 (Kp 7 - severe storm).

CMEs during the Two Activity Peaks in Cycle 24 and their Space Weather Consequences

N. **Gopalswamy**, P. Mäkelä, S. Akiyama, S. Yashiro, N. Thakur

Sun and Geosphere, 2015

<http://arxiv.org/pdf/1509.04216v1.pdf> **File**

Observations of a Quasi-periodic, Fast-Propagating Multiple Wavelengths and Its Interaction with Other Magnetic Structures

Y.-D. **Shen**, Y. Liu, J.-T. Su, H. Li, X.-F. Zhang, Z.-J. Tian, R.-J. Zhao, A. Elmhamdi

Solar Phys (2013) 288:585–602

Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. **Gopalswamy**

E-print, Jan 2013, **File**; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, 2012

24 Apr – 07:46: C3.7 вспышка, **пересвет** на STEREO-B, $B=12*2/299=0,08$
16:51: C2.6 вспышка, **пересвет** на STEREO-B, $B=6*2/299=0,04$

April 24

Coronal Quasi-periodic Fast-mode Propagating Wave Trains

Review

[Yuandeng Shen](#), [Xinping Zhou](#), [Yadan Duan](#), [Zehao Tang](#), [Chengrui Zhou](#), [Song Tan](#)

Solar Phys. 2022

<https://arxiv.org/pdf/2112.14959.pdf> **File**

First Unambiguous Imaging of Large-Scale Quasi-Periodic Extreme-Ultraviolet Wave or Shock

Yundeng [Shen](#), [P. F. Chen](#), [Ying D. Liu](#), [Kazunari Shibata](#), [Zehao Tang](#), [Yu Liu](#)

ApJ 873 22 2019

<https://iopscience.iop.org/article/10.3847/1538-4357/ab01dd/pdf>

<https://arxiv.org/pdf/1901.08199.pdf>

<https://doi.org/10.3847/1538-4357/ab01dd>

On the magnetism and dynamics of prominence legs hosting tornadoes

M. J. Martinez [Gonzalez](#), A. Asensio Ramos, I. Arregui, M. Collados, C. Beck, J. de la Cruz Rodriguez

ApJ 2016

<http://arxiv.org/pdf/1605.01183v1.pdf>

Height of Shock Formation in the Solar Corona Inferred from Observations of Type II Radio Bursts and Coronal Mass Ejections

N. [Gopalswamy](#), H. Xie, P. Makela, S. Yashiro, S. Akiyama, W. Uddin., A. K. Srivastava, N. C. Joshi, R. Chandra, P. K. Manoharan, K. Mahalakshmi, V. C. Dwivedi, R. Jain and A. K. Awasthi, N. V. Nitta, M. J. Aschwanden, D. P. Choudhary

E-print, Jan 2013; Adv. Space Res.

25 Apr

Deep Neural Networks of Solar Flare Forecasting for Complex Active Regions

Ming [Li](#), Yanmei Cui, Yanmei Cui, and Bingxian Luo

Front. Astron. Space Sci. 10: 1177550. 2023

doi: 10.3389/fspas.2023.1177550

<https://www.frontiersin.org/articles/10.3389/fspas.2023.1177550/pdf>

April 26 - around 0600 UT, an active region on the farside of the sun broke the calm with a powerful eruption, a massive cloud of plasma flying over the southwestern limb:

Propagating Disturbances along fan-like coronal loops in an active region

S. [Mandal](#), T. Samanta, D. Banerjee, S. Krishna Prasad, L. Teriaca

Research in Astronomy and Astrophysics (RAA) 2015

27 Apr – 08:31: M1.0 вспышка, **пересвет** на STEREO-A, $A=3*2/103=0.058$

27-28 Apr

Spectroscopy of very hot plasma in non-flaring parts of a solar limb active region: spatial and temporal properties

Susanna [Parenti](#), [Giulio del Zanna](#), [Antonino Petralia](#), [Fabio Reale](#), [Luca Teriaca](#), [Paola Testa](#), [Helen E. Mason](#)

2017

<https://arxiv.org/pdf/1707.08445.pdf>

Apparent Solar Tornado-Like Prominences

Olga [Panasenco](#), Sara F. Martin, Marco Velli

Solar Physics, February 2014, Volume 289, Issue 2, pp 603-622

SDO/AIA DETECTION OF SOLAR PROMINENCE FORMATION WITHIN A CORONAL CAVITY

Thomas E. [Berger](#)¹, Wei Liu^{2,3}, and B. C. Low

2012 ApJ 758 L37

28 April, >08 – крупная эрупция длинного южного волокна, сначала западного, потом восточного.

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. **Howard**¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden

2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86

<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>

<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

Coronal Condensation in Funnel Prominences as Return Flows of the Chromosphere-Corona Mass Cycle

Liu, Wei; Berger, Thomas E.; and Low, B. C.

2014/01, Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 441-442

http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf

28 Apr

Magnetic Structure and Propagation of Two Interacting CMEs from the Sun to Saturn

Erika **Palmerio**, [Teresa Nieves-Chinchilla](#), [Emilia K. J. Kilpua](#), [David Barnes](#), [Andrei N. Zhukov](#), [Lan K. Jian](#), [Olivier Witasse](#), [Gabrielle Provan](#), [Chihiro Tao](#), [Laurent Lamy](#), [Thomas J. Bradley](#), [M. Leila Mays](#), [Christian Möstl](#), [Elias Roussos](#), [Yoshifumi Futaana](#), [Adam Masters](#), [Beatriz Sánchez-Cano](#)

JGR 2021

<https://arxiv.org/pdf/2110.02190.pdf>

28 Apr-25 May

Simulating Solar Maximum Conditions Using the Alfvén Wave Solar Atmosphere Model (AWSoM)

Nishtha **Sachdeva**¹, Gábor Tóth¹, Ward B. Manchester¹, Bart van der Holst¹, Zhenguang Huang¹, Igor V. Sokolov¹, Lulu Zhao¹, Qusai Al Shidi¹, Yuxi Chen¹, Tamas I. Gombosi¹Show full author list

2021 ApJ 923 176

<https://iopscience.iop.org/article/10.3847/1538-4357/ac307c/pdf>

<https://doi.org/10.3847/1538-4357/ac307c>

29Apr – 00:56: C1.7 вспышка, **пересвет** на STEREO-A, $A=8^2/314=0,05$

30 Apr – 09:26: C2.4 вспышка, **пересвет** на STEREO-B, $B=4^2/314=0,026$

10:26: C5.6 вспышка, **пересвет** на STEREO-B, $B=10,5^2/314=0,067$

10:41: C6.0 вспышка, **пересвет** на STEREO-B, $B=9^2/314=0,057$

30 April

Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions

Ronald L. **Moore**^{1,2}, Navdeep K. Panesar^{3,4}, Alphonse C. Sterling², and Sanjiv K. Tiwari^{3,4}

2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

Polarity relevance in flux rope deflections triggered by coronal holes

Abri **Sahade**, [Mariana Cécere](#), [Andrea Costa](#), [Hebe Cremades](#)

A&A 2021

<https://arxiv.org/pdf/2104.07127.pdf>

Connecting 3D evolution of Coronal Mass Ejections to their Source Regions

[Satabdwa Majumdar](#), [Vaibhav Pant](#), [Ritesh Patel](#), [Dipankar Banerjee](#)

ApJ 2020

<https://arxiv.org/pdf/2007.00923.pdf>

Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and [Online Catalog](#)

Patrick I. [McCauley](#), Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves

Solar Phys. 2015

<http://arxiv.org/pdf/1505.02090v1.pdf>

2012 filament

Pankaj [Kumar](#), Kyung-Suk Cho

A&A, 2014

<http://arxiv.org/pdf/1409.7213v1.pdf>

1-9 May

On the non-Kolmogorov nature of flare-productive solar active regions

Revati S. [Mandage](#), R.T.James McAteer

ApJ 2016

<https://arxiv.org/pdf/1611.00830v1.pdf>

3 May

Investigating width distribution of slow and fast CMEs in solar cycles 23 and 24

[V. Pant](#), [R. Majumdar](#), [R. Patel](#), [A. Chauhan](#), [D. Banerjee](#), [N. Gopalswamy](#)

Frontiers in Astronomy and Space Sciences 2021

<https://arxiv.org/pdf/2104.12850.pdf>

<https://www.frontiersin.org/articles/10.3389/fspas.2021.634358/full>

<https://doi.org/10.3389/fspas.2021.634358>

On the Observations of Rapid Forced Reconnection in the Solar Corona

A. K. [Srivastava](#)¹, S. K. Mishra¹, P. Jelínek², Tanmoy Samanta³, Hui Tian³, Vaibhav Pant⁴, P. Kayshap², Dipankar Banerjee⁵, J. G. Doyle⁶, and B. N. Dwivedi¹

2019 ApJ 887 137

<https://doi.org/10.3847/1538-4357/ab4a0c>

On the rapid forced reconnection in the Sun's corona for its localized heating

A.K. [Srivastava](#), [P. Jelínek](#), [Sudheer K. Mishra](#), [Tanmoy Samanta](#), [Hui Tian](#), [Vaibhav Pant](#), [P. Kayshap](#), [D. Banerjee](#), [J.G. Doyle](#), [B.N. Dwivedi](#)

2019

<https://arxiv.org/pdf/1901.07971.pdf>

4-5 May

Solar Irradiance Variability Due To Solar Flares Observed in Lyman-alpha Emission

[Ryan O. Milligan](#)

Solar Phys. 2021

<https://arxiv.org/pdf/2102.00974.pdf>

5 May – 09:41: C6.8 вспышка, **пересвет** на STEREO-B, $B=15,5^2/300=0,103$

13:26: M1.4 вспышка, **пересвет** на STEREO-B, $B=19^2/300=0,13$

23:01: M1.3 вспышка, **пересвет** на STEREO-B, $B=17^2/300=0,11$

5 May

Rotation and Confined Eruption of a Double Flux-Rope System

[Xiaomeng Zhang](#), [Jinhan Guo](#), [Yang Guo](#), [Mingde Ding](#), [Rony Keppens](#)

ApJ 2023

<https://arxiv.org/pdf/2312.07406.pdf>

Quantification of the Writhe Number of the Evolution of Solar Filament Axes

Zhenjun **Zhou** (周振军)^{1,2,3,4}, Chaowei Jiang⁵, Hongqiang Song⁶, Yuming Wang³, Yongqiang Hao¹, and Jun Cui¹

2023 ApJ 944 175

<https://iopscience.iop.org/article/10.3847/1538-4357/acb6f8/pdf>

A study on Ca II 854.2 nm emission in a sunspot umbra using a thin cloud model

H. **Hamedivafa**, M. Sobotka, L. Bellot Rubio, S. Esteban Pozuelo

Iranian Journal of Astronomy and Astrophysics (IJAA) Vol. 3, No. 1, 2016

<https://arxiv.org/pdf/1612.06636v1.pdf>

Magnetic Twists of Solar Filaments

Jinhan **Guo**, [Yiwei Ni](#), [Ye Qiu](#), [Ze Zhong](#), [Yang Guo](#), [Pengfei Chen](#)

ApJ 2021

<https://arxiv.org/pdf/2107.02580.pdf>

НАЧАЛЬНЫЕ СКОРОСТИ КОРОНАЛЬНЫХ ВЫБРОСОВ МАСС И ОСОБЕННОСТИ СОПРОВОЖДАЕМЫХ ВСПЫШЕК

Дивлекеев М.И.

Пулково «Солнечная и солнечно-земная физика – 2015» с.115

Diagnosis of Magnetic and Electric Fields of Chromospheric Jets through pectropolarimetric Observations of H I Paschen Lines

Tetsu **Anan**, Roberto Casini, Kiyoshi Ichimoto

E-print, Feb 2014

6 May – 01:21: M1.1 вспышка, **пересвет** на STEREO-B, $B=0,04$

17:51: M1.3 вспышка, **пересвет** на STEREO-B, $B=17*2/300=0,11$

6 May

Three-Year Global Survey of Coronal Null Points from Potential-Field-Surface (PFSS) Modeling and Solar Dynamics Observatory (SDO) Observations

Michael **Freed**, Dana Longcope, David McKenzie

Solar Physics, 2014

<http://arxiv.org/pdf/1410.4493v1.pdf>

7 May – 14:41: M1.9 вспышка, **пересвет** на STEREO-A, $A=16*2/315=0,10$

17:26: C7.4 вспышка, **пересвет** на STEREO-B, $B=10,5*2/300=0,07$

7 May - Sunspot AR1471 erupted, producing an **M1 flare** (14:31) and an Earth-directed CME.

The most interesting CME of the day was observed after a **filament erupted** in the southeast quadrant beginning near 21:15 UTC.

Excitation of Quasiperiodic Fast-propagating Waves in the Early Stage of the Solar Eruption

Jialiang **Hu**^{1,2,3}, Jing Ye^{1,3,4}, Yuhao Chen^{1,2,3}, Zhixing Mei^{1,3}, Zehao Tang^{1,2,3}, and Jun Lin

2024 ApJ 962 42

<https://iopscience.iop.org/article/10.3847/1538-4357/ad1993/pdf>

Automatic detection of solar flares observed at 45 GHz by the POEMAS telescope

[Vanessa Lessa](#), [Adriana Valio](#)

Astronomy and Computing, **2023**, Volume 44, 100738

<https://arxiv.org/pdf/2309.06536.pdf>

Observations of Twist, Current Helicity, and Writhe in the Magnetic Knots of δ -sunspots Consistent with the Kink Instability of a Highly Twisted Flux Rope

Peter J. [Levens](#)¹, Aimee A. Norton¹, Mark G. Linton², Kalman J. Knizhnik², and Yang Liu¹

2023 ApJL 954 L20

<https://iopscience.iop.org/article/10.3847/2041-8213/acf0c6/pdf>

Compressive oscillations in hot coronal loops: Are sloshing oscillations and standing slow waves independent?

[S. Krishna Prasad](#), [T. Van Doorselaere](#)

ApJ **2021**

<https://arxiv.org/pdf/2104.12038.pdf>

Testing the background solar wind modelled by EUHFORIA

J. [Hinterreiter](#) (1,2), [J. Magdalenic](#) (3), [M. Temmer](#) (2), [C. Verbeke](#) (4), [I.C. Jeberaj](#) (3,4), [E. Samara](#) (3,4), [E. Asvestari](#) (2,5), [S. Poedts](#) (4), [J. Pomoell](#) (5), [E. Kilpua](#) (5), [L. Rodriguez](#) (3), [C. Scolini](#) (3,4), [A. Isavnin](#) (4)

Solar Phys. **2019**

<https://arxiv.org/pdf/1907.07461.pdf>

Properties of slow magnetoacoustic oscillations of solar coronal loops by multi-instrumental observations

[Nakariakov](#), V. M., Kosak, M. K., Kolotkov, D. Y., Anfinogentov, S. A., Kumar, P., Moon, Y.-J.

ApJL **2019**

A time dependent relation between EUV solar flare light-curves from lines with differing formation temperatures

Edward M.B. [Thiemann](#), Francis G. Eparvier and Thomas N. Woods

J. Space Weather Space Clim. **2017**, 7, A36

<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170050.pdf>

<https://arxiv.org/pdf/1703.02995.pdf>

Quasi-Periodic Radio Bursts Associated with Fast-mode Waves near a Magnetic Null Point

Pankaj [Kumar](#), Valery M. Nakariakov, Kyung-Suk Cho

ApJ **2017**

<https://arxiv.org/pdf/1706.09988.pdf>

Solar Radio Bursts with Spectral Fine Structures in Preflares

Yin [Zhang](#), Baolin Tan, Marian Karlický, Hana Mészárosová, Jing Huang, Chengming Tan, Paulo Simões

2014

<http://arxiv.org/pdf/1411.4766v1.pdf>

Three-Year Global Survey of Coronal Null Points from Potential-Field-Source-Surface (PFSS) Modeling and Solar Dynamics Observatory (SDO) Observations

Michael [Freed](#), Dana Longcope, David McKenzie

Solar Physics, **2014**

<http://arxiv.org/pdf/1410.4493v1.pdf>

SDO/AIA Observations of a Reflecting Longitudinal Wave in a Coronal Loop

Pankaj [Kumar](#), D.E. Innes, B. Inhester

2014

<http://arxiv.org/pdf/1409.3896v1.pdf>

8 May – 13:11: M1.4 вспышка, **пересвет** на STEREO-B, $B=22 \cdot 2/301=0,15$

May 8: A **filament eruption** beginning at 09:45 UTC near AR 11474 across the central meridian was the source of a small CME observed in both STEREO-A and B imagery after 11h UT

Statistical analysis of circular-ribbon flares

[Yanjie Zhang](#), [Qingmin Zhang](#), [Dechao Song](#), [Shuting Li](#), [Jun Dai](#), [Zhe Xu](#), [Haisheng Ji](#)

Astrophysical Journal Supplement Series

2022

<https://arxiv.org/pdf/2203.12819.pdf>

The Relation between Solar Eruption Topologies and Observed Flare Features I: Flare Ribbons

A. [Savcheva](#), E. Pariat, S. McKillop, [P. McCauley](#), [E. Hanson](#), [Y. Su](#), [E. Werner](#), [E. E. DeLuca](#)

2015

<http://arxiv.org/pdf/1506.03452v1.pdf>

Particle Acceleration in Plasmoid Ejections Derived from Radio Drifting Pulsating Structures

N. [Nishizuka](#)¹, M. Karlický², M. Janvier³, and M. Bárta

2015 ApJ 799 126

<http://arxiv.org/pdf/1412.7904v1.pdf>

ANTI-PHASE SIGNATURE OF FLARE GENERATED TRANSVERSE LOOP OSCILLATIONS

R. S. [White](#), E. Verwichte, and C. Foullon

2013 ApJ 774 104

8 – 10 May - Импульсные вспышки из AR 1476

Two successive partial mini-filament confined ejections

M. [Poisson](#), [C. Bustos](#), [M. López Fuentes](#), [C. H. Mandrini](#), [G.D. Cristiani](#)

2019

<https://arxiv.org/pdf/1911.00901.pdf>

Physical processes involved in the EUV "Surge" Event of 09 May 2012

Marcelo López [Fuentes](#), [Cristina H. Mandrini](#), [Mariano Poisson](#), [Pascal Démoulin](#), [Germán Cristiani](#), [Fernando M. López](#), [Maria Luisa Luoni](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1810.12403.pdf>

May 8-12 –..... HMI фильм развития крупной области 1638

<http://hmi.stanford.edu/hminuggets/?p=381>

9 May – 12:36: M4.7 вспышка, **пересвет** на STEREO-B, $B=17 \cdot 2/300=0,11$

May 9, ~21 UT, выброс в поглощении на 304 Å после импульсной вспышки

On orbit performance of the solar flare trigger for the Hinode EUV Imaging Spectrometer

[David H. Brooks](#), [Jeffrey W. Reep](#), [Ignacio Ugarte-Urra](#), [Harry P. Warren](#)

Brief Report in Frontiers in Astronomy and Space Sciences

2023

<https://arxiv.org/pdf/2303.13155.pdf>

Physical processes involved in the EUV "Surge" Event of 09 May 2012

Marcelo López [Fuentes](#), [Cristina H. Mandrini](#), [Mariano Poisson](#), [Pascal Démoulin](#), [Germán Cristiani](#), [Fernando M. López](#), [Maria Luisa Luoni](#)
Solar Phys. 2018
<https://arxiv.org/pdf/1810.12403.pdf>

A time dependent relation between EUV solar flare light-curves from lines with differing formation temperatures

Edward M.B. [Thiemann](#), Francis G. Eparvier and Thomas N. Woods
J. Space Weather Space Clim. 2017, 7, A36
<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170050.pdf>
<https://arxiv.org/pdf/1703.02995.pdf>

Spectral Trends of Solar Bursts at Sub-THz Frequencies

L. O. T. [Fernandes](#), P. Kaufmann, E. Correia, C. G. Giménez de Castro, A. S. Kudaka, A. Marun, P. Pereyra, J.-P. Raulin, A. B. M. Valio
[Solar Physics](#) January 2017, 292:21
<http://sci-hub.cc/10.1007/s11207-016-1043-6>

Prediction of Solar Flares Using Unique Signatures of Magnetic Field Images

Abbas [Raboonik](#), Hossein Safari, Nasibe Alipour, Michael S. Wheatland
ApJ 2016
<https://arxiv.org/abs/1610.03222>

9-14 May

A New Space Weather Tool for Identifying Eruptive Active Regions

P. [Pagano](#), [D. H. Mackay](#), [S. L. Yardley](#)
ApJ 2019
<https://arxiv.org/pdf/1910.04226.pdf>

10 May Filament eruption

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024
<https://arxiv.org/pdf/2401.16101.pdf>

The Rotation of Magnetic Flux Rope Formed during Solar Eruption

[Zhenjun Zhou](#), [Chaowei Jiang](#), [Rui Liu](#), [Yuming Wang](#), [Lijuan Liu](#), [Jun Cui](#)
ApJ 2022
<https://arxiv.org/pdf/2202.09073.pdf>

Magnetic Twists of Solar Filaments

Jinhan [Guo](#), [Yiwei Ni](#), [Ye Qiu](#), [Ze Zhong](#), [Yang Guo](#), [Pengfei Chen](#)
ApJ 2021
<https://arxiv.org/pdf/2107.02580.pdf>

Energy Partition in Four Confined Circular-Ribbon Flares

[Z. M. Cai](#), [Q. M. Zhang](#), [Z. J. Ning](#), [Y. N. Su](#), [H. S. Ji](#)
Solar Phys. 2021
<https://arxiv.org/pdf/2102.09819.pdf>

Two successive partial mini-filament confined ejections

M. [Poisson](#), [C. Bustos](#), [M. López Fuentes](#), [C. H. Mandrini](#), [G.D. Cristiani](#)
2019
<https://arxiv.org/pdf/1911.00901.pdf>

A Study of Pre-Flare Solar Coronal Magnetic Fields: Magnetic Flux Ropes

Aiyang [Duan](#), [Chaowei Jiang](#), [Wen He](#), [Xueshang Feng](#), [Peng Zou](#), [Jun Cui](#)

ApJ **2019**

<https://arxiv.org/pdf/1908.08643.pdf>

Investigation of white-light emission in circular-ribbon flares

Yongliang [Song](#), [Hui Tian](#)

ApJ **2018**

<https://arxiv.org/pdf/1810.02958.pdf>

Mini-filament Eruptions Triggering Confined Solar Flares Observed by ONSET and SDO

[Shuhong Yang](#), [Jun Zhang](#)

ApJL **2018**

<https://arxiv.org/pdf/1806.01763.pdf>

Observations of a white-light flare associated with a filament eruption

Y. L. [Song](#), [Y. Guo](#), [H. Tian](#), [X. S. Zhu](#), [M. Zhang](#), [Y. J. Zhu](#)

ApJ **2018**

<https://arxiv.org/pdf/1801.04408.pdf>

Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin [Toriumi](#), Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ **2016**

<https://arxiv.org/pdf/1611.05047v1.pdf>

The Energetics of White-light Flares Observed by SDO/HMI and RHESSI

Nengyi [Huang](#), Yan Xu, Haimin Wang

Research in Astronomy and Astrophysics **2016**

<http://arxiv.org/pdf/1608.06015v1.pdf>

НАБЛЮДАТЕЛЬНЫЕ СВИДЕТЕЛЬСТВА СВЯЗИ ВСПЛЫТИЯ МАГНИТНЫХ ПОЛЕЙ, ТОКОВ И СОЛНЕЧНЫХ ВСПЫШЕК 10 МАЯ 2012 Г.

М. А. [Лившиц](#),^{1, *} И. Ю. Григорьева,^{2, **} И. И. Мышьяков,^{3, ***} Г. В. Руденко

АЖ **2016** File

Evidence of the Relationship between the Emerging Magnetic Fields, Electric Currents, and Solar Flares Observed on May 10, 2012

M.A. [Livshits](#), I.Yu. Grigoryeva, I.I. Myshyakov, G.V. Rudenko

Astronomy Reports **2016** File

<http://arxiv.org/pdf/1604.07073v1.pdf>

МНОВОЛНОВЫЕ НАБЛЮДЕНИЯ ВСПЫШКИ 10 МАЯ 2012: УСКОРЕНИЕ ЧАСТИЦ И ВСПЛЫТИЕ МАГНИТНОГО ПОЛЯ

[Григорьева](#) И.Ю.¹, Кузнецов А.А.², Мешалкина Н.С.², Мышьяков И.И.²

Пулково «Солнечная и солнечно-земная физика – 2015», с.99

11 May

CME Magnetic Structure and IMF Preconditioning Affecting SEP Transport

Erika [Palmerio](#) , [Emilia K. J. Kilpua](#) , [Olivier Witasse](#) , [David Barnes](#) , [Beatriz Sánchez-Cano](#) , [Andreas J. Weiss](#) , [Teresa Nieves-Chinchilla](#) , [Christian Möstl](#) , [Lan K. Jian](#) , ... [See all authors](#)

Space Weather [Volume19, Issue4](#) , April **2021**, e2020SW002654

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002654>
<https://doi.org/10.1029/2020SW002654>

Statistics of coronal dimmings associated with coronal mass ejections.

I. Characteristic dimming properties and flare association

Karin [Dissauer](#), [Astrid M. Veronig](#), [Manuela Temmer](#), [Tatiana Podladchikova](#), [Kamalam Vanninathan](#)
ApJ 2018
<https://arxiv.org/pdf/1807.05056.pdf>

A time dependent relation between EUV solar flare light-curves from lines with differing formation temperatures

Edward M.B. [Thiemann](#), Francis G. Eparvier and Thomas N. Woods
J. Space Weather Space Clim. 2017, 7, A36
<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170050.pdf>
<https://arxiv.org/pdf/1703.02995.pdf>

May 11-12: A filament eruption began after 18h UTC on May 11 and involved a large area around the center of the disk, including the southern part of AR 11476, AR 11480 and extending towards the east. A CME was observed in STEREO-B at 23:54 UTC and in STEREO-A a couple of hours later when images resumed. LASCO displays a slow and small halo CME.

A time dependent relation between EUV solar flare light-curves from lines with differing formation temperatures

Edward M.B. [Thiemann](#), Francis G. Eparvier, Thomas N. Woods
Journal of Space Weather and Space Climate 2017
<https://arxiv.org/pdf/1703.02995.pdf>

11-17 May

CME Magnetic Structure and IMF Preconditioning Affecting SEP Transport

Erika [Palmerio](#), [Emilia K. J. Kilpua](#), [Olivier Witasse](#), [David Barnes](#), [Beatriz Sánchez-Cano](#), [Andreas J. Weiss](#), [Teresa Nieves-Chinchilla](#), [Christian Möstl](#), [Lan K. Jian](#), ... See all authors
Space Weather Volume19, Issue4, April 2021, e2020SW002654
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002654>
<https://doi.org/10.1029/2020SW002654>

12 May GLE71

What Causes Faint Solar Coronal Jets from Emerging Flux Regions in Coronal Holes?

Abigail R. [Harden](#), [Navdeep K. Panesar](#), [Ronald L. Moore](#), [Alphonse C. Sterling](#), [Mitzi L. Adams](#)
ApJ 2021
<https://arxiv.org/pdf/2103.07813.pdf>

Random Walk and Trapping of Interplanetary Magnetic Field Lines: Global Simulation, Magnetic Connectivity, and Implications for Solar Energetic Particles

Rohit [Chhiber](#), [David Ruffolo](#), [William H. Matthaeus](#), [Arcadi V. Usmanov](#), [Paisan Tooprakai](#), [Piyanate Chuychai](#), [Melvyn L. Goldstein](#)
ApJ 2020
<https://arxiv.org/pdf/2011.06620.pdf>

On the Relation between Flare and CME during GLE-SEP and Non-GLE-SEP Events

K. A. [Firoz](#)^{1,2}, W. Q. Gan², Y.-J. Moon¹, J. Rodríguez-Pacheco³, and Y. P. Li²
2019 ApJ 883 91
<https://doi.org/10.3847/1538-4357/ab3c4e>
<https://sci-hub.ru/10.3847/1538-4357/ab3c4e>

<https://iopscience.iop.org/article/10.3847/1538-4357/ab3c4e/pdf>

The Relation between Solar Eruption Topologies and Observed Flare Features II: Dynamical Evolution

A. **Savcheva**, E. Pariat, S. McKillop, P. McCauley, E. Hanson, Y. Su, & E. DeLuca
2015

http://www.pergamentum.com/eprint/savcheva_etal_ribbonsA_II.pdf

13 May

A propagation tool to connect remote-sensing observations with in-situ measurements of heliospheric structures

A.P. **Rouillard**, B. Lavraud, V. Genot, M. Bouchemit, N. Dufourg, I. Plotnikov, R.F. Pinto, E. Sanchez-Diaz, M. Lavarra, M. Penou, C. Jacquy, N. Andre, S. Caussarieu, J.-P. Toniutti, D. Popescu, E. Buchlin, S. Caminade, P. Alingery, J.A. Davies, D. Odstrcil, L. Mays
Planetary and Space Science **2017**

<https://arxiv.org/pdf/1702.00399v1.pdf>

14 May

Hot X-ray Onsets of Solar Flares

[Hugh S. Hudson](#), [Paulo J. A. Simoes](#), [Lyndsay Fletcher](#), [Laura A. Hayes](#), [Iain G. Hannah](#)

MNRAS **2020**

<https://arxiv.org/pdf/2007.05310.pdf>

Homologous large-amplitude Nonlinear fast-mode Magnetosonic Waves Driven by Recurrent Coronal Jets

Yuandeng **Shen**, [Yu Liu](#), [Ying D. Liu](#), [Jiangtao Su](#), [Zehao Tang](#), [Yuhu Miao](#)

The Astrophysical Journal, 861:105 (13pp), **2018** July 10

<http://iopscience.iop.org/article/10.3847/1538-4357/aac9be/pdf>

<https://arxiv.org/pdf/1805.12303.pdf>

16 May

Fitting and Reconstruction of Thirteen Simple Coronal Mass Ejections

Nada **Al-Haddad**, [Teresa Nieves-Chinchilla](#), [Neel P. Savani](#), [Noe Lugaz](#), [Iliia I. Roussev](#)

Solar Phys. **2018**

<https://arxiv.org/pdf/1804.02359.pdf>

Coronal cavities: observations and implications for the magnetic environment of prominences

Sarah E. **Gibson**

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K. A. **Firoz**, W. Q. Gan, Y. P. Li, J. Rodríguez-Pacheco

Solar Phys. **2014**

An Interpretation of GLE71 Concurrent CME-driven Shock Wave

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Proton activity of the Sun in current solar cycle 24

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RAA (Research in Astronomy and Astrophysics), **2014**
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E-print, July 2014; A&A, Volume 567, A27, July **2014**; **File**

Ground Level Enhancement in the 2014 January 6 Solar Energetic Particle Event

N. **Thakur**, N. Gopalswamy, H. Xie, P. Makela, S. Yashiro, S. Akiyama, J.M. Davila
E-print, July **2014**; **File**; ApJL
<http://arxiv.org/pdf/1406.7172v2.pdf>

The relativistic solar particle event of May 17th, 2012 observed on board the International Space Station

Francesco **Berrilli**^{1*}, Marco Casolino^{2,3}, Dario Del Moro¹, Luca Di Fino^{1,2}, Marianna Larosa^{1,2}, Livio Narici^{1,2}, Roberto Piazzesi¹, Piergiorgio Picozza^{1,2}, Stefano Scardigli¹, Roberta Sparvoli^{1,2}, Marco Stangalini⁴ and Veronica Zaonte
J. Space Weather Space Clim. 4 (**2014**) A16
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The Ground-level Enhancement of 2012 May 17: Derivation of Solar Proton Event Properties through the Application of the NMBANGLE PPOLA Model

Christina **Plainaki**, Helen Mavromichalaki, Monica Laurenza, Maria Gerontidou, Anastasios Kanellakopoulos, and Marisa Storini
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Analysis of the ground level enhancement on May 17, 2012 using data from the global neutron monitor 2 Network

A.L. **Mishev**, L.G. Kocharov and I.G. Usoskin
JGR, Volume 119, Issue 2, pages 670–679, February **2014**
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V. **Grechnev**, N. Meshalkina, I. Chertok, V. Kiselev
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Базилевская Г.А., Майоров А.Г., Малахов В.В., Михайлов В.В., Адриани О., Барбарино Д.С., Белотти Р., Боецио М., Богомолов Э.А., Бонвичини В., Бонджи М., Бонеки Л., Борисов С.В., Боттаи С., Бруно А., Вакки А., Вануччини Е., Васильев Г.И., Воронов С.А., Ву Ю. и др.
Известия РАН, Серия физическая, том 77, № 5, с. 557–560, **2013**.

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ELECTRON AND PROTON ACCELERATION DURING THE FIRST GROUND LEVEL ENHANCEMENT EVENT OF SOLAR CYCLE 24

C. **Li**^{1,2}, Kazi A. Firoz³, L. P. Sun¹, and L. I. Miroshnichenko

2013 ApJ 770 34

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HIGH-ENERGY GAMMA-RAY EMISSION FROM SOLAR FLARES: SUMMARY OF FERMI LAT DETECTIONS AND ANALYSIS OF TWO M-CLASS FLARES

M. **Ackermann**², M. Ajello³, A. Albert⁴, A. Allafort^{5,1}, L. Baldini⁶, G. Barbiellini^{7,8}, D. Bastieri et al.

Fermi-LAT collaboration

E-print, April **2013**, File; ApJ

THE FIRST GROUND LEVEL ENHANCEMENT EVENT OF SOLAR CYCLE 24: DIRECT OBSERVATION OF SHOCK FORMATION AND PARTICLE RELEASE HEIGHTS

N. **Gopalswamy**¹, H. Xie^{1,2}, S. Akiyama^{1,2}, S. Yashiro^{1,2}, I. G. Usoskin³, and J. M. Davila

2013 ApJ 765 L30

<http://cdaw.gsfc.nasa.gov/publications/gopal/gopal2013ApJL.pdf>

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COMPOUND TWIN CORONAL MASS EJECTIONS IN THE 2012 MAY 17 GLE EVENT

C. **Shen**^{1,2}, G. Li³, X. Kong^{3,4}, J. Hu³, X. D. Sun², L. Ding⁵, Y. Chen⁴, Yuming Wang¹, and L. Xia

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Solar energetic particle events in 2006-2012 in the PAMELA experiment data

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Large SEP events of 2012: proton onset and source function

Alexei **Struminsky**

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A. **Papaioannou**, G.Souvatzoglou, P.Paschalis, M.Gerontidou, H. Mavromichalaki

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<http://cosray.phys.uoa.gr/publications/D99.pdf>

Ground Level Enhancement of May 17, 2012 Observed at South Pole

Takao [Kuwabara](#)^{1,3}; John Bieber¹; John Clem^{1,3}; Paul Evenson^{1,3}; Tom Gaisser^{1,3}; Roger Pyle²; Serap Tilav

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Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. [Gopalswamy](#)

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N. [Gopalswamy](#)

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Segmental interpolating spectra for solar particle events and in situ validation

S. [Hu](#), C. Zeitlin, W. Atwell, D. Fry, J.E. Barzilla, E. Semones

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On the Area Expansion of Magnetic Flux-Tubes in Solar Active Regions

[Dudik](#), J., Dzifcakova, E., Cirtain, J. W.

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<http://arxiv.org/pdf/1409.6947v1.pdf>

DETERMINING HEATING TIME SCALES IN SOLAR ACTIVE REGION CORES FROM AIA/SDO FE XVIII IMAGES

IGNACIO [UGARTE-URRA](#)¹ AND HARRY P. WARREN²

eprint arXiv:1311.6346, ApJ, **2014**

<http://arxiv.org/abs/1311.6346>

19 May

Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and [Online Catalog](#)

Patrick I. [McCauley](#), Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves

Solar Phys. **2015**

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Predicting the Geoeffectiveness of CMEs Using Machine Learning

[Andreea-Clara Pricopi](#), [Alin Razvan Paraschiv](#), [Diana Besliu-Ionescu](#), [Anca-Nicoleta Marginean](#)

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Goldstone Apple Valley Radio Telescope Observations of 2012 Solar Eclipse: A Multi-wavelength study of cm-wavelength Gyroresonance Emission from Active Regions

[T. Velusamy](#), [T. B. H Kuiper](#), [S. M. Levin R. Dorcsey](#), [N. Kreuser-Jenkins](#), [J. Leflang](#)

PASP 2020

<https://arxiv.org/ftp/arxiv/papers/2007/2007.05058.pdf>

Solar rotation inferred from radial velocities of the sun-as-a-star during the 2012 May 21 eclipse

Yoichi **Takeda**, Osamu Ohshima, Eiji Kambe, Hiroyuki Toda, Hisashi Koyano, Bun'ei Sato, Yasuhisa Nakamura, Norio Narita, Takashi Sekii

Publ. Astron. Soc. Japan, 2014

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Goldstone Apple Valley Radio Telescope Observations of 2012 Solar Eclipse: A Multi-wavelength study of cm-wavelength Gyroresonance Emission from Active Regions

[T. Velusamy](#), [T. B. H Kuiper](#), [S. M. Levin](#), [R. Dorcsey](#), [N. Kreuser-Jenkins](#), [J. Leflang](#)

PASP 2020

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May 22

High-precision Multichannel Solar Image Registration Using Image Intensity

Bo **Liang**¹, Xi Chen¹, Lan Yu², Song Feng^{6,1}, Yangfan Guo¹, Wenda Cao^{3,4}, Wei Dai¹, Yunfei Yang¹, and Ding Yuan⁵

2022 ApJS 261 10

<https://iopscience.iop.org/article/10.3847/1538-4365/ac7232/pdf>

Achievements and Lessons Learned from Successful Small Satellite Missions for Space Weather-Oriented Research

[Harlan E. Spence](#), [Amir Caspi](#), [Hasan Bahcivan](#), [Jesus Nieves-Chinchilla](#), [Geoff Crowley](#), [James Cutler](#), [Chad Fish](#), [David Jackson](#), [Therese Moretto Jørgensen](#), [David Klumpar](#), [Xinlin Li](#), [James P. Mason](#), [Nick Paschalidis](#), [John Sample](#), [Sonya Smith](#), [Charles M. Swenson](#), [Thomas N. Woods](#)

Space Weather 2022

<https://arxiv.org/ftp/arxiv/papers/2206/2206.02968.pdf>

Proton activity of the Sun in current solar cycle 24

Chuan **Li**, Leonty Miroshnichenko, Cheng Fang

RAA (Research in Astronomy and Astrophysics), 2014

<http://arxiv.org/pdf/1408.2308v1.pdf>

Kink Instability Evidenced by Analyzing the Leg Rotation of a Filament

X. L. **Yan**^{1,2}, Z. K. Xue¹, J. H. Liu³, L. Ma¹, D. F. Kong¹, Z. Q. Qu¹, and Z. Li

2014 ApJ 782 67

23 May

Measuring magnetic field with Atacama Large Millimeter/Submillimeter Array **Review**

Maria **Loukitcheva**

Front. Astron. Space Sci. 7:45 2020

https://www.frontiersin.org/articles/10.3389/fspas.2020.00045/full?utm_source=F-AAE&utm_medium=EMLF&utm_campaign=MRK_1406443_76_Astron_20200818_arts_A
<https://doi.org/10.3389/fspas.2020.00045>

25 May – 10:21: C1.6 вспышка, **пересвет** на STEREO-B, $B=5^{\circ}2/300=0,033$
12:36: C2.0 вспышка, **пересвет** на STEREO-B, $B=6^{\circ}2/300=0,04$

May 25 and CR 2124

Measuring three-dimensional shapes of stable solar prominences using stereoscopic observations from SDO and STEREO

Chengrui [Zhou](#), [Chun Xia](#), [Yuandeng Shen](#)

A&A 2021

<https://arxiv.org/pdf/2103.07111.pdf>

Global Solar Free Magnetic Energy and Electric Current Density Distribution of Carrington Rotation 2124

Tilaye [Tadesse](#), Alexei A. Pevtsov, T. Wiegelmann, P. J. MacNeice, S. Gosain

Solar Physics November 2014, Volume 289, Issue 11, pp 4031-4045

26 May – 16:16: C2.7 **пересвет** $B=7,5*2/300=0,05 \leftarrow 16s \ 8s \rightarrow B=7,5/300=0.025$

May 26 - 20:45, AR 11476 several days behind the west limb. This major event was associated with a full halo CME and a **noticeable increase in the above 10 MeV proton flux**.

Reconstruction of the magnetic connection from Mercury to the solar corona during enhancements in the solar proton fluxes at Mercury

A. [Ippolito](#)^{1,2}, C. Plainaki¹, G. Zimbardo³, T. Alberti⁴, S. Massetti⁴, A. Milillo⁴ and S. Orsini⁴

A&A 660, A50 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/04/aa42328-21.pdf>

Early-stage Solar Energetic Particle Acceleration by Coronal Mass Ejection-driven Shocks with Realistic Seed Spectra. I. Low Corona

Kamen A. [Kozarev](#)¹, Maher A. Dayeh^{2,3}, and Ashraf Farahat⁴

2019 ApJ 871 65

sci-hub.tw/10.3847/1538-4357/aaf1ce

Study of Solar Energetic Particle Associations with Coronal Extreme-ultraviolet Waves

Jinhye [Park](#)¹, D. E. Innes², R. Bucik^{2,3}, Y.-J. Moon^{1,4}, and S. W. Kahler

2015 ApJ 808 3 **File**

https://www.academia.edu/35052617/STUDY_OF_SOLAR_ENERGETIC_PARTICLE_ASSOCIATIONS_WITH_CORONAL_EXTREME-ULTRAVIOLET_WAVES?email_work_card=view-paper

Observations of Coronal Mass Ejections with the Coronal Multichannel Polarimeter

H. Tian, S. Tomczyk, S. W. McIntosh, C. Bethge, G. de Toma, S. Gibson

E-print, March 2013, **File**; Sol. Phys. (2013) 288:637–650

27May – 06:16: C3.1 **пересвет** $B=13*2/300=0,087 \leftarrow 16s \ 8s \rightarrow B=13/300=0.043$

May 27 - SE AR1492 erupted at 05:51, producing a LDE C3-class flare and hurling a coronal mass ejection (CME) toward Mars.

On the Role of Interplanetary Shocks in Accelerating MeV Electrons

N. Talebpour [Sheshvan](#), [N. Dresing](#), [R. Vainio](#), [A. Afanasiev](#), [D. E. Morosan](#)

A&A 2023

<https://arxiv.org/pdf/2301.05587.pdf>

High-energy solar particle events in cycle 24

Nat [Gopalswamy](#), [Pertti Makela](#), [Seiji Yashiro](#), [Hong Xie](#), [Sachiko Akiyama](#), [Neeharika Thakur](#)

The 14th International Astrophysics Conference held in Tampa, FL during April 24-29, 2015. Accepted for publication in Journal of Physics: Conference Series (JPCS). edited by G. Zank, 2015

<http://arxiv.org/ftp/arxiv/papers/1507/1507.06162.pdf>; **File**

ARE GIANT TORNADOES THE LEGS OF SOLAR PROMINENCES?

Sven [Wedemeyer](#)¹, Eamon Scullion¹, Luc Rouppe van der Voort¹, Antonija Bosnjak¹, and Patrick Antolin
2013 ApJ 774 123
<http://arxiv.org/abs/1306.2661>

Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. [Gopalswamy](#)

E-print, Jan 2013, **File**; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, 2012

May 27-30

Solar wind prediction using deep learning

Vishal [Upendran](#), [M.C.M Cheung](#), [Shravan Hanasoge](#), [Ganapathi Krishnamurthi](#)

Space Weather 2020

<https://arxiv.org/pdf/2006.05825.pdf>

May 28

On the formation of a stable penumbra in a region of flux emergence in the Sun

M. [Murabito](#), P. Romano, S. L. Guglielmino, F. Zuccarello

ApJ 2016

<https://arxiv.org/pdf/1611.04749v1.pdf>

Semiempirical photospheric models of a solar flare on May 28, 2012

E.S. [Andriets](#), , N.N. Kondrashova

Advances in Space Research, Volume 55, Issue 3, 1 February 2015, Pages 871–878

<http://www.sciencedirect.com/science/article/pii/S0273117714004827>

May 28-29

Recent insights on the penumbra formation process

M. [Murabito](#), [P.Romano](#), [F. Zuccarello](#), [S.L.Guglielmino](#)

"Nuovo Cimento C" as proceeding of the Third Meeting of the Italian Solar and Heliospheric Community 2019

<https://arxiv.org/pdf/1901.05207.pdf>

Formation of the penumbra and start of the Evershed flow

M. [Murabito](#), P. Romano, S. L. Guglielmino, F. Zuccarello, S.K. Solanki

ApJ 2016

<http://arxiv.org/pdf/1604.05610v1.pdf>

May 30

Comparison of damping models for kink oscillations of coronal loops

Yu [Zhong](#),¹ Dmitrii Y. Kolotkov , ^{1,2} Sihui Zhong ¹ and Valery M. Nakariakov

Monthly Notices of the Royal Astronomical Society, Volume 525, Issue 4, 2023, Pages 5033–5040,

<https://doi.org/10.1093/mnras/stad2598>

<https://watermark.silverchair.com/stad2598.pdf>

https://warwick.ac.uk/fac/sci/physics/research/cfsa/people/valery/zhong_y_23.pdf

A statistical study of decaying kink oscillations detected using SDO/AIA

C. R. [Goddard](#), G. Nisticò, V. M. Nakariakov, I. V. Zimovets

A&A 2015

<http://arxiv.org/pdf/1511.03558v1.pdf>

Decayless coronal loop oscillations seen by SDO/AIA

Giuseppe [Nisticò](#), V. M. Nakariakov, and E. Verwichte

UKSP Nugget: 35, May 2013

<http://www.uksolphys.org/?p=6162>

31 May – 1 June

On Flare and CME Predictability Based on Sunspot Group Evolution

M. B. [Korsos](#),^{1,2} and M. S. Ruderman²

Ground-based Solar Observations in the Space Instrumentation Era

ASP Conference Series, Vol. 504 p. 43, 2016

<http://aspbooks.org/publications/504/043.pdf>

2 June

Inflows in the Inner White-light Corona: The Closing-down of Flux after Coronal Mass Ejections

P. [Hess](#) and Y.-M. Wang

2017 ApJ 850 6

<http://sci-hub.cc/10.3847/1538-4357/aa921d>

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia [Alzate](#) and Huw Morgan

2017 ApJ 840 103

<http://sci-hub.cc/10.3847/1538-4357/aa6caa>

3 June – 17:56: M5.1 вспышка, **пересвет** на STEREO-B, $B=27^{\circ}2/300=0,18$

June 3 - New sunspot 1496 (N16E38) unleashed a **VERY impulsive M3-class flare** at 1755 UT. **Корональная волна (see ПРОБА), в том числе в H-альфа, приличный CME, type II**

Relationships between Photospheric Vertical Electric Currents and Hard X-Ray Sources in Solar Flares: Statistical Study

I.V. [Zimovets](#), I.N. [Sharykin](#), [W.Q. Gan](#)

ApJ 2020

<https://arxiv.org/pdf/2002.06646.pdf>

Особенности развития длительных потоков высокоэнергичного гамма-излучения на разных стадиях солнечных вспышек.

[Минасянц](#) Г.С., Минасянц Т.М., Томозов В.М.

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<https://naukaru.ru/ru/storage/view/39748>

Comparing Long-Duration Gamma-Ray Flares and High-Energy Solar Energetic Particles

G. A. [de Nolfo](#), [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevskaaya](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ 2019

<https://arxiv.org/pdf/1905.12878.pdf> File

X-Ray, Radio and SEP Observations of Relativistic Gamma-Ray Events

Review

Karl-Ludwig [Klein](#), Kostas Tziotziou, Pietro Zucca, Eino Valtonen, Nicole Vilmer, Olga E. Malandraki, Clarisse Hamadache, Bernd Heber, and Jürgen Kiener

In: O.E. Malandraki, N.B. Crosby (eds.), Solar Particle Radiation Storms Forecasting and Analysis

Chapter 8, 2018

<https://link.springer.com/content/pdf/10.1007%2F978-3-319-60051-2.pdf>

File Malandraki_Crosby_SEPs_Forecasting and Analysis_Book.pdf

HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE

Thesis Catalog (2010-2017)

Allafort, A. J.

(2018). PhD thesis, Stanford Univ. **File**

https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf

Decameter Type III Bursts with Changing Frequency Drift-Rate Signs

V.N.[Melnik](#), [A.I.Brazhenko](#), [A.A.Konovalenko](#), [C.Briand](#), [V.V.Dorovskyy](#), [P.Zarka](#), [A.V.Frantsuzenko](#), [H.O.Rucker](#), [B.P.Rutkevych](#), [M.Panchenko](#), [L.Denis](#), [T.Zaqarashvili](#), [B.Shergelashvili](#)

Solar phys. **2018**

<https://arxiv.org/ftp/arxiv/papers/1802/1802.08336.pdf>

Proton Acceleration by Very Impulsive Flare on June 3, 2012

K. [Kamiya](#), 1) K. Koga, 1) S. Masuda, 2) H. Matsumoto, 1) Y. Muraki, 2) T. Obara, 3) O. Okudaira, 4) Y. Tanaka, 5) S. Shibata, 6) and T. Goka1)

Proc. of 35th International Cosmic Ray Conference — ICRC2017 10–20 July, 2017 Bexco, Busan, Korea

<https://pos.sissa.it/301/115/pdf>

Characteristics of Sustained >100 γ -ray Emission Associated with Solar Flares

G. H. [Share](#), R. J. Murphy, A. K. Tolbert, B. R. Dennis, S. M. White, R. A. Schwartz, and A. J. Tylka
ApJ Supplement **2017**

http://www.astro.umd.edu/~share/publications/share_2017.pdf **File**

Transient Mass Loss Analysis of Solar Observations using Stellar Methods

M. K. [Crosley](#), R. A. Osten, C. Norman

2017

<https://arxiv.org/pdf/1707.01928.pdf>

IMPULSIVITY PARAMETER FOR SOLAR FLARES

W. G. [Fajardo-Mendieta](#)1,2, J. C. Mart?nez-Oliveros3, J. D. Alvarado-G?mez1,4,5, and B. Calvo-Mozo
2016 ApJ 818 56

<http://arxiv.org/pdf/1602.03958v1.pdf>

The Search for >35 MeV Neutrons from the June 3, 2012 Impulsive Flare

K. [Koga](#), S. Masuda, [H. Matsumoto](#), [Y. Muraki](#), [T. Obara](#) [O. Okudaira](#), [S. Shibata](#), [T. Yamamoto](#), [T. Goka](#)

Proceeding of the 34th International Cosmic Ray Conference in Hague in August, 2015, **2015**

<http://arxiv.org/ftp/arxiv/papers/1508/1508.04930.pdf>

Observation of solar high energy gamma and X-ray emission and solar energetic particles

Alexei [Struminsky](#), Weiqun Gan

24th European Cosmic Ray Symposium, Kiel, September 2014, **2015**

Analysis of the Impulsive Phase of Solar Flares with Pass 8 LAT data

R. [Desiante](#), [F. Longo](#), [N. Omodei](#), [M. Pesce-Rollins](#), [V. Pelassa](#) [for the Fermi-LAT Collaboration](#)
2014 Fermi Symposium proceedings - eConf C141020.1

<http://arxiv.org/pdf/1502.04916v1.pdf>

Moreton Waves and EIT Waves Related to the Flare Events of June 3, 2012 and July 6, 2012

A. G. [Admiranto](#), R. Priyatikanto, U. Yus'an, E. Puspitaningrum

International Conference on Mathematics and Natural Sciences **2014**

<http://arxiv.org/pdf/1502.04039v1.pdf>

Observational Characteristics of **CMEs without Low Coronal Signatures**

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

Moreton Waves Related to the Flare Event in **3 June 2012** and **6 July 2012**

Agustinus Gunawan **Admiranto**, Rhorom Priyatikanto

Journal of the Korean Astronomical Society (<http://jkas.kas.org>), 2014

<http://arxiv.org/pdf/1408.6677v1.pdf>

HIGH-ENERGY GAMMA-RAY EMISSION FROM SOLAR FLARES: SUMMARY OF FERMI LAT DETECTIONS AND ANALYSIS OF TWO M-CLASS FLARES

M. **Ackermann**², M. Ajello³, A. Albert⁴, A. Allafort^{5,1}, L. Baldini⁶, G. Barbiellini^{7,8}, D. Bastieri et al.

Fermi-LAT collaboration

E-print, April 2013, File; ApJ

June 5 – A filament eruption near AR 11493 and close to the central meridian was observed beginning at 19:30 UTC. A small CME was observed at 20:39 UTC in STEREO-A.

June 5-6 the Venus transit

Structure of the transition region and the low corona from TRACE and SDO observations near the limb

C. E. **Alissandrakis**, [A. Valentino](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1906.09497.pdf>

On the occurrence of thermal non-equilibrium in coronal loops

C. **Froment**, [F. Auchère](#), [Z. Mikić](#), [G. Aulanier](#), [K. Bocchialini](#), [E. Buchlin](#), [J. Solomon](#), [E. Soubrié](#)

ApJ 2018

<https://arxiv.org/pdf/1802.04010.pdf>

Non-parametric PSF estimation from celestial transit solar images using blind deconvolution

Adriana **González**^{1*}, Véronique Delouille² and Laurent Jacques

J. Space Weather Space Clim., 6, A1 (2016)

<http://www.swsc-journal.org/articles/swsc/pdf/2016/01/swsc140059.pdf>

Achieving Consistent Doppler Measurements from SDO/HMI Vector Field Inversions

P. W. **Schuck**, Spiro Antiochos, K.D. Leka, Graham Barnes

ApJ 2015

<http://arxiv.org/pdf/1511.06500v1.pdf>

June 6 - A partial halo CME associated with an M2 flare in AR 11494 was observed from 20:39 UTC in LASCO images. **Корональная волна.**

Differential Emission Measure Evolution as a Precursor of Solar Flares

C. **Gontikakis** (1), [I. Kontogiannis](#) (2), [M.K. Georgoulis](#) (1,3), [C. Guennou](#) (4), [P. Syntelis](#) (5), [S.H. Park](#) (6), [E. Buchlin](#)

2020

<https://arxiv.org/pdf/2011.06433.pdf>

Solar sources of interplanetary magnetic clouds leading to helicity prediction

Roger K. [Ulrich](#), [Pete Riley](#), [T. Tran](#)

Space Weather 2018

<https://arxiv.org/ftp/arxiv/papers/1811/1811.03560.pdf>

Statistics of coronal dimmings associated with coronal mass ejections.

I. Characteristic dimming properties and flare association

Karin [Dissauer](#), [Astrid M. Veronig](#), [Manuela Temmer](#), [Tatiana Podladchikova](#), [Kamalam Vanninathan](#)

ApJ 2018

<https://arxiv.org/pdf/1807.05056.pdf>

Multi-label Learning for Detection of CME-Associated Phenomena

Y. H. [Yang](#), H. M. Tian, B. Peng, T. R. Li, Z. X. Xie

[Solar Physics](#) September 2017, 292:131

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1136-x.pdf>

Global Energetics of Solar Flares: IV. Coronal Mass Ejection Energetics

Markus J. Aschwanden

ApJ 2016

<http://arxiv.org/pdf/1605.04952v1.pdf> File

http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf

Type II and Type III Radio Bursts and their Correlation with Solar Energetic Proton Events

L.M. [Winter](#), K. Ledbetter

ApJ 2015

<http://arxiv.org/pdf/1507.01620v1.pdf>

Solar type II radio bursts associated with CME expansions as shown by EUV waves

R. D. [Cunha-Silva](#), F. C. R. Fernandes, C. L. Selhorst

A&A 2015

<http://arxiv.org/pdf/1504.04323v1.pdf>

June 7

Evidence for evaporation-incomplete condensation cycles in warm solar coronal loops

Clara [Froment](#), [Frédéric Auchère](#), [Karine Bocchialini](#), [Eric Buchlin](#), [Chloé Guennou](#), [Jacques Solomon](#)

2015

<http://arxiv.org/pdf/1504.08129v1.pdf>

Sunspot waves and flare energy release

R. [Sych](#), M. Karlický, A. Altyntsev, J. Dudík, L. Kashapova

A&A, 2014

<http://arxiv.org/pdf/1409.2947v1.pdf>

8 June

Automatic Detection of Interplanetary Coronal Mass Ejections in Solar Wind In Situ Data

Hannah T. [Rüdisser](#), [Andreas Windisch](#), [Ute V. Amerstorfer](#), [Christian Möstl](#), [Tanja](#)

[Amerstorfer](#), [Rachel L. Bailey](#), [Martin A. Reiss](#)

Space Weather 2022

<https://arxiv.org/pdf/2205.03578.pdf>

Temperature in Solar Sources of 3He-rich Solar Energetic Particles and Relation to Ion Abundances

R. [Bucik](#), [S. M. Mulay](#), [G. M. Mason](#), [N. V. Nitta](#), [M. I. Desai](#), [M. A. Dayeh](#)

ApJ 2021

<https://arxiv.org/pdf/2012.15390.pdf>

Hydrogen and the Abundances of Elements in Impulsive Solar Energetic-Particle Events

Donald V. [Reames](#)

Solar Phys. 2019

<https://arxiv.org/ftp/arxiv/papers/1901/1901.04369.pdf>

A STEREO Survey of Magnetic Cloud Coronal Mass Ejections Observed at Earth in 2008-2012

Brian E. [Wood](#), Chin-Chun Wu, Ronald P. Lepping, [Teresa Nieves-Chinchilla](#), [Russell A. Howard](#), [Mark G. Linton](#), [Dennis G. Socker](#)

Astrophysical Journal Supplement 2017 File

<https://arxiv.org/pdf/1701.01682v1.pdf>

9 June – 11:31: M1.9 вспышка, **пересвет** на STEREO-B, $B=17^*2/167=0,2$
16:56: M1.8 вспышка, **пересвет** на STEREO-B, $B=10^*2/167=0,12$

Нет изображения 2048; только фильм

June 9 - A fast-growing active region near AR1499 is crackling with very **impulsive M-class** solar flares, including two on June 9th (1132 UT and 1650 UT).

Type II and Type III Radio Bursts and their Correlation with Solar Energetic Proton Events

L.M. [Winter](#), K. Ledbetter

ApJ 2015

<http://arxiv.org/pdf/1507.01620v1.pdf>

Observational Characteristics of **CMEs without Low Coronal Signatures**

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

10 June – 06:46: M1.3 вспышка, **пересвет** на STEREO-B, $B=24^*2/300=0,16$

10 June - New sunspot AR1504 is crackling with **impulsive M-class** solar flares.

11-15 June

Time-dependent Data-driven Modeling of Active Region Evolution Using Energy-optimized Photospheric Electric Fields

Jens [Pomoell](#), Erkkka Lumme, Emilia Kilpua

[Solar Physics](#) April 2019, 294:41

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1430-x.pdf>

11Jun-30Jul

Solar Energetic Particle-Associated Coronal Mass Ejections Observed by the Mauna Loa Solar Observatory Mk3 and Mk4 Coronameters

I. G. [Richardson](#), [O. C. St Cyr](#), [J. T. Burkepile](#), [H. Xie](#), [B. J. Thompson](#)

Solar Phys. 2023

<https://arxiv.org/pdf/2308.10826.pdf>

12 June – >13 UT, **крупная эрупция во всей южной полусфере**; не очень значительный CME; a minor geostorm (Dst~-56) due to a glancing blow from a CME observed on 08 June.

Suprathermal Population Associated with Stream Interaction Regions Observed by STEREO-A: New Insights

Bijoy **Dalal**^{1,2}, Dibyendu Chakrabarty¹, Nandita Srivastava³, and Aveek Sarkar¹

2024 ApJ 960 16

<https://iopscience.iop.org/article/10.3847/1538-4357/ad08c6/pdf>

12-16 June

Sun-to-Earth Observations and Characteristics of Isolated Earth-Impacting Interplanetary Coronal Mass Ejections During 2008 – 2014

D. **Maričić**, **B. Vršnak**, **A. M. Veronig**, **M. Dumbović**, **F. Šterc**, **D. Roša**, **M. Karlica**, **D. Hržina** & **I. Romštajn**

Solar Physics volume 295, Article number: 91 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01658-4.pdf>

Multipoint Observations of the June 2012 Interacting Interplanetary Flux Ropes

Emilia K. J. **Kilpua**, **Simon W. Good**, **Erika Palmerio**, **Eleanna Asvestari**, **Erkka Lumme**, Matti Ala-Lahti, **Milla M. H. Kalliokoski**, Diana E. Morosan, Jens Pomoell, **Daniel J. Price**, Jasmina

Front. Astron. Space Sci. 2019

sci-hub.se/10.3389/fspas.2019.00050

<https://www.frontiersin.org/articles/10.3389/fspas.2019.00050/full>

Prediction of Geomagnetic Storm Strength from Inner Heliospheric In Situ Observations

M. **Kubicka**, C. Möstl, T. Amerstorfer, P. D. Boakes, L. Feng, J. P. Eastwood, O. Tormanen 2016

<https://arxiv.org/pdf/1610.06713v1.pdf>

13 June - central AR1504 **erupted** at 1319 UT, producing a **very long-duration M1-flare** and hurling a **partial halo CME**

Narrowband spikes observed during the 13 June 2012 flare in the 800-2000 MHz range

M. Karlicky, **J. Rybak**, **J. Benacek**, **J. Kasparova**

Solar Phys. 2022

<https://arxiv.org/pdf/2204.09327.pdf>

Modeling the Observed Distortion of Multiple (Ghost) CME Fronts in STEREO Heliospheric Imagers

Yutian **Chi**^{1,2,3}, Christopher Scott², Chenglong Shen^{1,3}, Luke Barnard², Mathew Owens², Mengjiao Xu¹, Jie Zhang⁴, Shannon Jones², Zhihui Zhong¹, Bingkun Yu^{1,2}Show full author list

2021 ApJL 917 L16

<https://iopscience.iop.org/article/10.3847/2041-8213/ac1203/pdf>

<https://doi.org/10.3847/2041-8213/ac1203>

A new trigger mechanism for coronal mass ejections: the role of confined flares and photospheric motions in the formation of hot flux ropes

Alexander W James, **Lucie M Green**, **Lidia van Driel-Gesztelyi**, **Gherardo Valori**

A&A 2020

<https://arxiv.org/pdf/2010.11204.pdf>

Temporal Evolution of Chromospheric Oscillations in Flaring Regions - A Pilot Study

Teresa [Monsue](#), [Frank Hill](#), [Keivan G. Stassun](#)

ApJ 2018

<https://arxiv.org/pdf/1803.02506.pdf>

13-14 June

Investigating the Variations in Compositions and Heating of Interacting ICMEs

Nandita [Srivastava](#), Zavkiddin Mirtoshev, and Wageesh Mishra

Front. Astron. Space Sci., 10 :1154612 2023

<https://doi.org/10.3389/fspas.2023.1154612>

<https://www.frontiersin.org/articles/10.3389/fspas.2023.1154612/pdf>

Sunspot Rotation in High- and Low-Flaring Active Regions

Richard [Grimes](#) & [Balázs Pintér](#)

[Solar Physics](#) volume 297, Article number: 109 (2022)

<https://link.springer.com/content/pdf/10.1007/s11207-022-02040-2.pdf>

Modeling the Observed Distortion of Multiple (Ghost) CME Fronts in STEREO Heliospheric Imagers

Yutian [Chi](#)^{1,2,3}, Christopher Scott², Chenglong Shen^{1,3}, Luke Barnard², Mathew Owens², Mengjiao Xu¹, Jie Zhang⁴, Shannon Jones², Zhihui Zhong¹, Bingkun Yu^{1,2} Show full author list

2021 ApJL 917 L16

<https://iopscience.iop.org/article/10.3847/2041-8213/ac1203/pdf>

<https://doi.org/10.3847/2041-8213/ac1203>

Using the "Ghost Front" to Predict the Arrival Time and Speed of CMEs at Venus and Earth

Yutian [Chi](#)^{1,2,3}, Christopher Scott², Chenglong Shen^{1,3}, Mathew Owens², Matthew Lang², Mengjiao Xu¹, Zhihui Zhong¹, Jie Zhang⁴, Yuming Wang¹, and Mike Lockwood²

2020 ApJ 899 143

<https://doi.org/10.3847/1538-4357/aba95a>

<https://iopscience.iop.org/article/10.3847/1538-4357/aba95a/pdf>

Investigation of pre-flare dynamics using the weighted horizontal magnetic gradient method: From small to major flare classes

Marianna B. [Korsos](#), [Shuhong Yang](#), [Robert Erdelyi](#)

Journal of Space Weather and Space Climate

2019

<https://arxiv.org/pdf/1901.05984.pdf>

Interplanetary and Geomagnetic Consequences of Interacting CMEs of 13-14 June 2012

Nandita [Srivastava](#), [Wageesh Mishra](#), [D. Chakrabarty](#)

Solar Phys. 2017

<https://arxiv.org/pdf/1712.08408.pdf>

Assessing the collision nature of coronal mass ejections in the inner heliosphere

Wageesh [Mishra](#), [Yuming Wang](#), [Nandita Srivastava](#), [Chenglong Shen](#)

ApJ Supplement Series 2017

<https://arxiv.org/pdf/1707.08299.pdf>

14 June - A very long duration M1.9 event in region 11504 peaked at 14.35 UTC.

Homology with the 13th eruption. A large CME was observed in STEREO imagery. The fast-moving (1360 km/s) cloud is expected to sweep up a previous CME

Investigating pre-eruptive magnetic properties at the footprints of erupting magnetic flux ropes

[Wensi Wang](#), [Jiong Qiu](#), [Rui Liu](#), [Chunming Zhu](#), [Kai E Yang](#), [Qiang Hu](#), [Yuming Wang](#)

ApJ 2022

<https://arxiv.org/pdf/2211.15909.pdf>

A magnetic cloud prediction model for forecasting space weather relevant properties of Earth-directed coronal mass ejections

Sanchita [Pal](#), [Dibyendu Nandy](#), [Emilia K J Kilpua](#)

A&A 2022

<https://arxiv.org/pdf/2203.05231.pdf>

Arrival Time Estimates of Earth-Directed CME-Driven Shocks

K. [Suresh](#), [N. Gopalswamy](#) & [A. Shanmugaraju](#)

Solar Physics volume 297, Article number: 3 (2022)

<https://doi.org/10.1007/s11207-021-01914-1>

<https://link.springer.com/content/pdf/10.1007/s11207-021-01914-1.pdf>

Modeling the Observed Distortion of Multiple (Ghost) CME Fronts in STEREO Heliospheric Imagers

Yutian [Chi](#)^{1,2,3}, Christopher Scott², Chenglong Shen^{1,3}, Luke Barnard², Mathew Owens², Mengjiao Xu¹, Jie Zhang⁴, Shannon Jones², Zhihui Zhong¹, Bingkun Yu^{1,2} Show full author list

2021 ApJL 917 L16

<https://iopscience.iop.org/article/10.3847/2041-8213/ac1203/pdf>

<https://doi.org/10.3847/2041-8213/ac1203>

Space weather: the solar perspective -- an update to Schwenn (2006)

Review

[Manuela Temmer](#)

Living Reviews in Solar Physics 2021

<https://arxiv.org/pdf/2104.04261.pdf>

Moving solar radio bursts and their association with coronal mass ejections

[D. E. Morosan](#), [A. Kumari](#), [E. K. J. Kilpua](#), [A. Hamini](#)

A&A 2021

<https://arxiv.org/pdf/2103.05942.pdf>

An Observational Revisit of Stationary Type IV Solar Radio Bursts

[Maoshui Lv](#), [Yao Chen](#), [V. Vasanth](#), [Mohd Shazwan Radzi](#), [Zamri Zainal Abidin](#) & [Christian Monstein](#)

Solar Physics volume 296, Article number: 38 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01769-6.pdf>

A new trigger mechanism for coronal mass ejections: the role of confined flares and photospheric motions in the formation of hot flux ropes

[Alexander W James](#), [Lucie M Green](#), [Lidia van Driel-Gesztelyi](#), [Gherardo Valori](#)

A&A 2020

<https://arxiv.org/pdf/2010.11204.pdf>

Polarisation and source structure of solar stationary type IV radio bursts★

Carolina [Salas-Matamoros](#)¹ and Karl-Ludwig Klein

A&A 639, A102 (2020)

<https://www.aanda.org/articles/aa/pdf/2020/07/aa37989-20.pdf>

The Nature and Origin of Moving Solar Radio Bursts Associated with Coronal Mass Ejections

Diana [Morosan](#), Emilia Kilpua, Erika Palmerio, Benjamin Lynch, Jens Pomoell, Rami Vainio, Minna Palmroth, Juska Räsänen
EGU2020 Presentation #5379 [File](#)

A New Space Weather Tool for Identifying Eruptive Active Regions

P. [Pagano](#), [D. H. Mackay](#), [S. L. Yardley](#)

ApJ **2019**

<https://arxiv.org/pdf/1910.04226.pdf>

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha [Sachdeva](#)

Ph.D. [Thesis](#) **2019**

<https://arxiv.org/pdf/1907.12673.pdf>

Observation-based modelling of magnetised Coronal Mass Ejections with EUHFORIA

Camilla [Scolini](#), [Luciano Rodriguez](#), [Marilena Mierla](#), [Jens Pomoell](#), [Stefaan Poedts](#)

A&A **2019**

<https://arxiv.org/pdf/1904.07059.pdf>

Time-dependent Data-driven Modeling of Active Region Evolution Using Energy-optimized Photospheric Electric Fields

Jens [Pomoell](#), Erkka Lumme, Emilia Kilpua

[Solar Physics](#) April **2019**, 294:41

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1430-x.pdf>

Evolution of A Magnetic Flux Rope toward Eruption

Wensi [Wang](#), [Chunming Zhu](#), [Jiong Qiu](#), [Rui Liu](#), [Kai E. Yang](#), [Qiang Hu](#)

ApJ **2018**

<https://arxiv.org/pdf/1812.03437.pdf>

Solar sources of interplanetary magnetic clouds leading to helicity prediction

Roger K. [Ulrich](#), [Pete Riley](#), [T. Tran](#)

Space Weather **2018**

<https://arxiv.org/ftp/arxiv/papers/1811/1811.03560.pdf>

Statistics of coronal dimmings associated with coronal mass ejections.

II. Relationship between coronal dimmings and their associated CMEs

Karin [Dissauer](#), [Astrid M. Veronig](#), [Manuela Temmer](#), [Tatiana Podladchikova](#)

ApJ **2018**

<https://arxiv.org/pdf/1810.01589.pdf>

Dependence of coronal mass ejection properties on their solar source active region characteristics and associated flare reconnection flux

Sanchita [Pal](#), [Dibyendu Nandy](#), [Nandita Srivastava](#), [Nat Gopalswamy](#), [Suman Panda](#)

2018

<https://arxiv.org/pdf/1808.04144.pdf>

Onboard Automated CME Detection Algorithm for Visible Emission Line Coronagraph on ADITYA-L1

Ritesh [Patel](#), [K Amareswari](#), [Vaibhav Pant](#), [Dipankar Banerjee](#), [Sankarasubramanian K](#), [Amit Kumar](#)

Solar Phys. **2018**

<https://arxiv.org/pdf/1806.07932.pdf>

An Observationally-Constrained Model of a Flux Rope that Formed in the Solar Corona

Alexander W. [James](#), [Gherardo Valori](#), [Lucie M. Green](#), [Yang Liu](#), [Mark C. M. Cheung](#), [Yang Guo](#), [Lidia van Driel-Gesztelyi](#)

ApJ 2018
<https://arxiv.org/pdf/1802.07965.pdf>

On-disc Observations of Flux Rope Formation Prior to its Eruption

A. W. **James**, L. M. Green, E. Palmerio, G. Valori, H. A. S. Reid, D. Baker, D. H. Brooks, L. van Driel-Gesztelyi, E. K. J. Kilpua
Solar Phys. 2017
<https://arxiv.org/pdf/1703.10837.pdf>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth: 2. Geomagnetic response

N. P. **Savani**, A. Vourlidas, I. G. Richardson, A. Szabo, B. J. Thompson, A. Pulkkinen, M. L. Mays, T. Nieves-Chinchilla, V. Bothmer
Space Weather Volume 15, Issue 2 February 2017 Pages 441–461 DOI: 10.1002/2016SW001458
<http://onlinelibrary.wiley.com/doi/10.1002/2016SW001458/full>
<http://sci-hub.cc/10.1002/2016SW001458>

Determining the Intrinsic CME Flux Rope Type Using Remote-sensing Solar Disk Observations

E. **Palmerio**, E. K. J. Kilpua, A. W. James, L. M. Green, J. Pomoell, A. Isavnin, G. Valori
Solar Physics February 2017, 292:39

Determining the Intrinsic CME Flux Rope Type Using Remote-sensing Solar Disk Observations

E. **Palmerio**, E. K. J. Kilpua, A. W. James, L. M. Green, J. Pomoell, A. Isavnin, G. Valori
Solar Physics February 2017, 292:39

Predicting the magnetic vectors within coronal mass ejections arriving at Earth:

2. Geomagnetic response: BZ VALIDATION

N. P. **Savani**,^{1,2} A. Vourlidas,³ I. G. Richardson,^{4,2} A. Szabo,² B. J. Thompson,² A. Pulkkinen,² M. L. Mays,^{5,2} T. Nieves-Chinchilla,^{5,2} V. Bothmer⁶
Space Weather 2016

Prediction of Geomagnetic Storm Strength from Inner Heliospheric In Situ Observations

M. **Kubicka**, C. Möstl, T. Amerstorfer, P. D. Boakes, L. Feng, J. P. Eastwood, O. Tormanen
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<https://arxiv.org/pdf/1610.06713v1.pdf>

Prediction of Solar Flares Using Unique Signatures of Magnetic Field Images

Abbas **Raboonik**, Hossein Safari, Nasibe Alipour, Michael S. Wheatland
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<https://arxiv.org/abs/1610.03222>

The Storm of Decameter Spikes During the Event of 14 June 2012

N. V. **Shevchuk**, V. N. Melnik, S. Poedts, V. V. Dorovskyy, J. Magdalenic, A. A. Konovalenko, A. I. Brazenk, C. Briand, A. V. Frantsuzenko and [2 more](#)
Solar Phys. 2015

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

1. Initial architecture

Savani, N. P.; Vourlidas, A.; Szabo, A.; Mays, M. L.; Thompson, B. J.; Richardson, I. G.; Evans, R.; Pulkkinen, A.; Nieves-Chinchilla, T.
Space Weather, Volume 13, Issue 6 June 2015 Pages 374–385,
<http://arxiv.org/pdf/1502.02067v1.pdf> File
<http://onlinelibrary.wiley.com/doi/10.1002/2015SW001171/full>

Multi-channel Observations of Plasma Outflows and the Associated Small-Scale Magnetic Field Cancellations on the Edges of an Active Region

S. [Liu](#), J.T. Su

Ap&SS 2014

<http://arxiv.org/pdf/1405.3648v1.pdf>

Connecting speeds, directions and arrival times of 22 coronal mass ejections from the Sun to 1 AU

C. [Möstl](#), K. Amla, J. R. Hall, P. C. Liewer, E. M. De Jong, R. C. Colaninno, A. M. Veronig, T. Rollett, M. Temmer, V. Peinhart, J. A. Davies, N. Lugaz, Y. D. Liu, C.J. Farrugia, J. G. Luhmann, B. Vršnak, R. A. Harrison, A. B. Galvin

ApJ, 2014

<http://arxiv.org/pdf/1404.3579v1.pdf>

HIGH-ENERGY GAMMA-RAY EMISSION FROM SOLAR FLARES: SUMMARY OF FERMI LAT DETECTIONS AND ANALYSIS OF TWO M-CLASS FLARES

M. [Ackermann](#)², M. Ajello³, A. Albert⁴, A. Allafort^{5,1}, L. Baldini⁶, G. Barbiellini^{7,8}, D. Bastieri et al.

[Fermi-LAT collaboration](#)

E-print, April 2013, [File](#); ApJ

SIMULTANEOUS OBSERVATION OF SOLAR OSCILLATIONS ASSOCIATED WITH CORONAL LOOPS FROM THE PHOTOSPHERE TO THE CORONA

J. T. [Su](#)¹, Y. Liu², S. Liu¹, Y. Z. Zhang¹, H. Zhao¹, H. Q. Xu¹, and W. B. Xie

2013 ApJ 762 42

14-17 June

Multipoint Observations of the June 2012 Interacting Interplanetary Flux Ropes

Emilia K. J. [Kilpua](#), [Simon W. Good](#), [Erika Palmerio](#), [Eleanna Asvestari](#), [Erkka Lumme](#), Matti Ala-Lahti, [Milla M. H. Kalliokoski](#), Diana E. Morosan, Jens Pomoell, [Daniel J. Price](#), Jasmina

Front. Astron. Space Sci. 2019

[sci-hub.se/10.3389/fspas.2019.00050](https://doi.org/10.3389/fspas.2019.00050)

<https://www.frontiersin.org/articles/10.3389/fspas.2019.00050/full>

Coronal Magnetic Structure of Earthbound CMEs and In situ Comparison

Erika [Palmerio](#), [Emilia K. J. Kilpua](#), [Christian Möstl](#), [Volker Bothmer](#), [Alexander W. James](#), [Lucie M. Green](#), [Alexey Isavnin](#), [Jackie A. Davies](#), [Richard A. Harrison](#)

Space Weather 2018

<https://arxiv.org/pdf/1803.04769.pdf> [File](#)

15 June

Predicting the Time-of-Arrival of Coronal Mass Ejections at Earth From Heliospheric Imaging Observations

Carlos Roberto [Braga](#), [Angelos Vourlidas](#), [Guillermo Stenborg](#), [Alisson Dal Lago](#), [Rafael Rodrigues Souza de Mendonça](#), [Ezequiel Echer](#)

JGR 2020

<https://arxiv.org/pdf/2008.09005.pdf>

16 June

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

Origination of Extremely Intense South Component of Magnetic Field (B_{θ}) in the ICME

Chenglong [Shen](#), Yutian Chi, Mengjiao Xu, and Yuming Wang

Front. Phys., 2021 |
<https://www.frontiersin.org/articles/10.3389/fphy.2021.762488/full>
<https://doi.org/10.3389/fphy.2021.762488>

The radial speed-expansion speed relation for Earth-directed CMEs

P. **Mäkelä**, N. Gopalswamy, S. Yashiro
Space Weather Volume 14, Issue 5 May 2016 Pages 368–378 **File**
<http://cdaw.gsfc.nasa.gov/publications/makela/makela2016SpaceWeather.pdf>

Average spatial distribution of cosmic rays behind the interplanetary shock -Global Muon Detector Network observations-

M. **Kozai**, K. Munakata, C. Kato, T. Kuwabara, M. Rockenbach, A. Dal Lago, N. J. Schuch, C. R. Braga, R. R. S. Mendonça, H. K. Al Jassar, M. M. Sharma, M. L. Duldig, J. E. Humble, P. Evenson, I. Sabbah, M. Tokumaru
ApJ 2016
<http://arxiv.org/pdf/1605.06591v1.pdf>

16-18 June – Сложная геомагнитная буря от предшествующих эрупций с **сильным предвестником** (возрастанием) и **Dst ~- 80 нТ**, а также серьезный **форбуш**.

Validation and interpretation of three-dimensional configuration of a magnetic cloud flux rope

Qiang **Hu**, [Chunming Zhu](#), [Wen He](#), [Jiong Qiu](#), [Lan K. Jian](#), [Avijeet Prasad](#)
ApJ 2022
<https://arxiv.org/pdf/2204.03457>

Multipoint Observations of the June 2012 Interacting Interplanetary Flux Ropes

Emilia K. J. **Kilpua**, [Simon W. Good](#), [Erika Palmerio](#), [Eleanna Asvestari](#), [Erkka Lumme](#), Matti Ala-Lahti, [Milla M. H. Kalliokoski](#), Diana E. Morosan, Jens Pomoell, [Daniel J. Price](#), Jasmina
Front. Astron. Space Sci. 2019
<sci-hub.se/10.3389/fspas.2019.00050>
<https://www.frontiersin.org/articles/10.3389/fspas.2019.00050/full>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

Savani, N. P.; Vourlidas, A.; Szabo, A.; Mays, M. L.; Thompson, B. J.; Richardson, I. G.; Evans, R.; Pulkkinen, A.; Nieves-Chinchilla, T.
Space Weather Journal, Jan 2015, **File**
<http://arxiv.org/pdf/1502.02067v1.pdf>

Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. **Gopalswamy**
E-print, Jan 2013, **File**; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, 2012

17 June

A partial filament eruption in three steps induced by external magnetic reconnection

[Jun Dai](#), [Zhentong Li](#), [Ya Wang](#), [Zhe Xu](#), [Yanjie Zhang](#), [Leping Li](#), [Qingmin Zhang](#), [Yingna Su](#), [Haisheng Ji](#)
2022
<https://arxiv.org/ftp/arxiv/papers/2201/2201.11314.pdf>

A Database of Flare Ribbon Properties From Solar Dynamics Observatory I: Reconnection Flux

Maria D. [Kazachenko](#), Benjamin J. Lynch, Brian T. Welsch, Xudong Sun

ApJ 2017

<https://arxiv.org/pdf/1704.05097.pdf>

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

A Flare Observed in Coronal, Transition Region and Helium I 10830 ? Emissions

Zhicheng [Zeng](#), Jiong Qiu, Wenda Cao, Philip G. Judge

2014

<http://arxiv.org/pdf/1408.0236v1.pdf>

17-18 June

Study of Failed CME Core Associated with Asymmetric Filament Eruption

[Joshi](#), N. C.; [Srivastava](#), A. K.; [Filippov](#), B.; [Uddin](#), W.; [Kayshap](#), P.; [Chandra](#), R.

E-print, April 2013, ApJ 771 65

<http://arxiv.org/abs/1304.6852>

20 June

Investigating the differential emission measure and energetics of microflares with combined SDO/AIA and RHESSI observations

A. R. [Inglis](#), S. Christe

2014, ApJ

<http://arxiv.org/pdf/1405.5262v1.pdf>

21 June

Multiwavelength High-resolution Observations of Chromospheric Swirls in the Quiet Sun

Juie [Shetye](#)¹, Erwin Verwichte¹, Marco Stangalini^{2,3}, Philip G. Judge⁴, J. G. Doyle⁵, Tony Arber¹, Eamon Scullion⁶, and Sven Wedemeyer^{7,8}

2019 ApJ 881 83

<https://iopscience.iop.org/article/10.3847/1538-4357/ab2bf9/pdf>

Spatially resolved signatures of bi-directional flows observed in inverted-Y shaped jets

C. J. [Nelson](#), [N. Freij](#), [S. Bennett](#), [R. Erdélyi](#), [M. Mathioudakis](#)

ApJ 2019

<https://arxiv.org/pdf/1908.05132.pdf>

Signatures of quiet Sun reconnection events in Ca II, H α , and Fe I

J [Shetye](#) [S Shelyag](#) [A L Reid](#) [E Scullion](#) [J G Doyle](#) [T D Arber](#)

Monthly Notices of the Royal Astronomical Society, Volume 479, Issue 3, 21 September 2018, Pages 3274–3287

<http://sci-hub.tw/10.1093/mnras/sty1548>

Vortex Flows in the Solar Atmosphere: Automated Identification and Statistical Analysis

Ioannis [Giagkiozis](#), Viktor Fedun, Eamon Scullion, Gary Verth

2018 ApJ 869 169

<https://arxiv.org/pdf/1706.05428.pdf>

<http://iopscience.iop.org/article/10.3847/1538-4357/aaf797/pdf>

Small-Scale Structuring Of Ellerman Bombs at Solar Limb

C. J. **Nelson**, E. M. Scullion, J. G. Doyle, N. Freij, R. Erdélyi
ApJ, **2014**
<http://arxiv.org/pdf/1410.5715v1.pdf>

ARE GIANT TORNADOES THE LEGS OF SOLAR PROMINENCES?

Sven **Wedemeyer**¹, Eamon Scullion¹, Luc Rouppe van der Voort¹, Antonija Bosnjak¹, and Patrick Antolin
2013 ApJ 774 123
<http://arxiv.org/abs/1306.2661>

21 June – July 2012

Chromospheric Synoptic Maps of Polar Crown Filaments

Andrea **Diercke**, [Carsten Denker](#)
Solar Phys. 294:152 **2019**
<https://arxiv.org/pdf/1910.07943.pdf>
<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1538-z.pdf>

23 June - long duration C2 event peaking at 07:50 had its origin in a **large filament eruption** (impressive in STEREO-A imagery) **behind the NW limb**. STEREO-A – на диске, хорошая корональная волна.

Difference of source regions between fast and slow coronal mass ejections

B. **Filippov**
PASAustralia **2019**
<https://arxiv.org/pdf/1904.04060.pdf>

Tracking of an electron beam through the solar corona with LOFAR

G. **Mann**¹, F. Breitling¹, C. Vocks¹, H. Aurass¹, M. Steinmetz¹,
A&A 611, A57 (**2018**)
<https://www.aanda.org/articles/aa/pdf/2018/03/aa29017-16.pdf>
<http://sci-hub.tw/https://www.aanda.org/articles/aa/abs/2018/03/aa29017-16/aa29017-16.html>

Microwave and EUV Observations of an Erupting Filament and Associated Flare and Coronal Mass Ejections

C. E. **Alissandrakis**, A. A. Kochanov, S. Patsourakos, A. T. Altyntsev, S. V. Lesovoi, N. N. Lesovoya
Publ. Astron. Soc. Japan 65, No SP1, S8 [10 pages] (**2013**)
<http://pasj.asj.or.jp/v65/sp1/65S008/65S008.pdf>

24 June

Coronal Condensation in Funnel Prominences as Return Flows of the Chromosphere-Corona Mass Cycle

Liu, Wei; Berger, Thomas E.; and Low, B. C.
2014/01, Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 441-442
http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf

25 June

Statistical Analysis and Catalog of Non-polar Coronal Holes Covering the SDO-Era Using CATCH

Stephan G. **Heinemann**, [Temmer Manuela](#), [Heinemann Niko](#), [Dissauer Karin](#), [Samara Evangelia](#), [Jerčić Veronika](#), [Stefan J. Hofmeister](#), [Astrid M Veronig](#)
Solar Phys. 294:144 **2019**
<https://arxiv.org/pdf/1907.01990.pdf> **File**
<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1539-y.pdf>

26 June – 13:16: C1.3 вспышка, **пересвет** на STEREO-B, $B=8*2/300=0,053$

26 June – 8 July

Achieving Consistent Doppler Measurements from SDO/HMI Vector Field Inversions

P. W. **Schuck**, Spiro Antiochos, K.D. Leka, Graham Barnes

ApJ 2015

<http://arxiv.org/pdf/1511.06500v1.pdf>

27 June – 05:36: C3.4 вспышка, **пересвет** на STEREO-B, $B=5,5^2/300=0,037$

12:36: C3.4 вспышка, **пересвет** на STEREO-B, $B=7,5^2/300=0,05$

27 June

Eruptive Solar Prominence at 37 GHz

J. **Kallunki**, M. Tornikoski

[Solar Physics](#) July 2017, 292:84

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. **Howard**¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden

2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86

<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>

<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

Coronal Condensation in Funnel Prominences as Return Flows of the Chromosphere-Corona Mass Cycle

Liu, Wei; Berger, Thomas E.; and Low, B. C.

2014/01, Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 441-442

http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf

28 June – 16:16: M2.4 **пересвет** $B=37^2/297=0,25 \leftarrow 16s \ 8s \rightarrow 16:11 \ 20^2/297=0,1346$

28 June – very impulsive M2.4/1B flare at 16:12

29 June – 01:26: C6.7 вспышка, **пересвет** на STEREO-B, $B=8^2/298=0,054$

06:51: C6.2 вспышка, **пересвет** на STEREO-B, $B=5^2/298=0,034$

09:21: M2.2 вспышка, **пересвет** на STEREO-B, $B=17^2/298=0,11$

29 June

Small-scale Flux Emergence, Coronal Hole Heating, and Flux-tube Expansion: A Hybrid Solar Wind Model

Y.-M. **Wang**

2020 ApJ 904 199

<https://doi.org/10.3847/1538-4357/abbda6>

<https://arxiv.org/ftp/arxiv/papers/2104/2104.04016.pdf>

Solar flare accelerated electrons from high and low radio frequencies

Hamish **Reid***^{†1} and Larisa Kashapova²

CESRA 2016 p.78

http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v3.pdf

Coronal Condensation in Funnel Prominences as Return Flows of the Chromosphere-Corona Mass Cycle

Liu, Wei; Berger, Thomas E.; and Low, B. C.

2014/01, Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 441-442
http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf

29, 30 June – more very impulsive flares

29 June–7 Jul

What Are the Causes of Super Activity of Solar Active Regions?

Suman K. **Dhakal**¹ and Jie Zhang¹

2024 ApJ 960 36

<https://iopscience.iop.org/article/10.3847/1538-4357/ad07d2/pdf>

30 June

Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions

Ronald L. **Moore**^{1,2}, Navdeep K. Panesar^{3,4}, Alphonse C. Sterling², and Sanjiv K. Tiwari^{3,4}

2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions

Ronald L. **Moore**, [Navdeep K. Panesar](#), [Alphonse C. Sterling](#), [Sanjiv K. Tiwari](#)

ApJ 2022

<https://arxiv.org/ftp/arxiv/papers/2203/2203.13287.pdf>

Space weather: the solar perspective -- an update to Schwenn (2006)

Review

[Manuela Temmer](#)

Living Reviews in Solar Physics 2021

<https://arxiv.org/pdf/2104.04261.pdf>

Earth-affecting Solar Transients: A **Review** of Progresses in Solar Cycle 24

Jie **Zhang**, [Manuela Temmer](#), [Nat Gopalswamy](#), [Olga Malandraki](#), [Nariaki V. Nitta](#), [Spiros Patsourakos](#), [Fang Shen](#), [Bojan Vršnak](#), [Yuming Wang](#), [David Webb](#), [Mihir I. Desai](#), [Karin Dissauer](#), [Nina Dresing](#), [Mateja Dumbović](#), [Xueshang Feng](#), [Stephan G. Heinemann](#), [Monica Laurenza](#), [Noé Lugaz](#), [Bin Zhuang](#)

<https://arxiv.org/ftp/arxiv/papers/2012/2012.06116.pdf> File 2021

2020 <https://arxiv.org/abs/2012.06116>

The Lyman-alpha Emission in Solar Flares. I. a Statistical Study on Its Relationship with the 1--8 Å Soft X-ray Emission

[Zhichen Jing](#), [Wuqi Pan](#), [Yukun Yang](#), [Dechao Song](#), [Jun Tian](#), [Y. Li](#), [X. Cheng](#), [Jie Hong](#), [M. D. Ding](#)

ApJ 2020

<https://arxiv.org/pdf/2009.10358.pdf>

Coronal-Jet-Producing Minifilament Eruptions as a Possible Source of Parker Solar Probe (PSP) Switchbacks

[Alphonse C. Sterling](#), [Ronald L. Moore](#)

ApJ 2020

<https://arxiv.org/pdf/2006.04990.pdf>

On Solar Recurrent Coronal Jets: Coronal Geysers as Sources of Electron Beams and Interplanetary Type-III Radio Bursts

Alin Razvan **Paraschiv** and Alina Donea

2019 ApJ 873 110

<https://doi.org/10.3847/1538-4357/ab04a6>
<https://arxiv.org/pdf/1903.04682.pdf>

MINIFILAMENT ERUPTIONS THAT DRIVE CORONAL JETS IN A SOLAR ACTIVE REGION

Alphonse C. [Sterling](#)¹, Ronald L. Moore^{1,2}, David A. Falconer^{1,2}, Navdeep K. Panesar^{1,2}, Sachiko Akiyama^{3,4}, Seiji Yashiro^{3,4}, and Nat Gopalswamy

2016 ApJ 821 100

<https://iopscience.iop.org/article/10.3847/0004-637X/821/2/100/pdf>

30 June-4 July

Evolution of Magnetic Helicity and Energy Spectra of Solar Active Regions

Hongqi [Zhang](#), Axel Brandenburg, D.D. Sokoloff

2015

<http://arxiv.org/pdf/1503.00846v1.pdf>

July 2012

Solar Energetic Particle-Associated Coronal Mass Ejections Observed by the Mauna Loa Solar Observatory Mk3 and Mk4 Coronameters

I. G. [Richardson](#), [O. C. St Cyr](#), [J. T. Burkepile](#), [H. Xie](#), [B. J. Thompson](#)

Solar Phys. 2023

<https://arxiv.org/pdf/2308.10826.pdf>

Shock Connectivity in the August 2010 and July 2012 Solar Energetic Particle Events Inferred from Observations and ENLIL Modeling

H. M. [Bain](#), M. L. Mays, J. G. Luhmann, Y. Li, L. K. Jian, and D. Odstrcil

2016 ApJ 825 1

Dynamics of Microwave Sources Associated with the Neutral Line and the Magnetic-Field Parameters of Sunspots as a Factor in Predicting Large Flares

V. E. [Abramov-Maximov](#), V. N. Borovik, L. V. Opeikina, A. G. Tlatov

Solar Phys., 2014

1 July

Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions

Ronald L. [Moore](#)^{1,2}, Navdeep K. Panesar^{3,4}, Alphonse C. Sterling², and Sanjiv K. Tiwari^{3,4}

2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

<https://arxiv.org/ftp/arxiv/papers/2203/2203.13287.pdf>

What Causes Faint Solar Coronal Jets from Emerging Flux Regions in Coronal Holes?

Abigail R. [Harden](#), [Navdeep K. Panesar](#), [Ronald L. Moore](#), [Alphonse C. Sterling](#), [Mitzi L. Adams](#)

ApJ 2021

<https://arxiv.org/pdf/2103.07813.pdf>

Homologous flaring activity over a sunspot light bridge in an emerging active region

[Rohan E. Louis](#), [Julia K. Thalmann](#)

ApJL 2020

<https://arxiv.org/pdf/2012.07454.pdf>

Magnetic Flux Cancellation as the Origin of Solar Quiet Region Pre-Jet Minifilaments

Navdeep K. **Panesar**, Alphonse C. Sterling, Ronald L. Moore
ApJ **2017**
<https://arxiv.org/pdf/1706.09079.pdf>

Investigation of recurrent EUV jets from highly dynamic magnetic field region

Navin **Chandra**, Ramesh Chandra, Yang Guo, Tetsuya Magara, Ivan Zhelyazkov, Young-Jae Moon, Wahab Uddin
Astrophysics and Space Science January **2017**, 362:10

Observing the formation of flare-driven coronal rain

E. **Scullion**, L. Rouppe Van Der Voort, P. Antolin, S. Wedemeyer, G. Vissers, E. P. Kontar, P. Gallagher
2016
<https://arxiv.org/pdf/1610.09255v1.pdf>

Cluster of solar active regions and onset of coronal mass ejections.

Wang J X, Zhang Y Z, He H, et al.
SCIENCE CHINA Physics, Mechanics & Astronomy (Sci China-Phys Mech Astron), **2015**, 58(9): 599601 **File**
<http://link.springer.com/journal/11433/58/9/page/1>
<http://phys.scichina.com:8083/sciGe/EN/article/showFieldArticle.do?fieldId=81>

Triggering an eruptive flare by emerging flux in a solar active-region complex

Louis, Rohan E.; Kliem, Bernhard; Ravindra, B.; Chintzoglou, Georgios
Solar Phys. **2015**
<http://arxiv.org/pdf/1506.08035v1.pdf>

1, 2 July - more very impulsive flares, including M5.6 flare on 2 July. Кроме того, заливбовая активность (STEREO-B)

AR 11513 - Flares: M1.1/1N at 00:35, C4.5/1F at 18:12, C6.5/1F at 23:39 UTC as well as several smaller C class events.

AR 11515 - Flares: C3.5 at 05:08 (associated with a weak type II radio sweep), major M5.6/2B at 10:52 (again associated with a weak **type II** radio sweep), M3.8/2B at 20:07, M2.0 at 23:56 UTC + several small C class events.

Are chains of type I radio bursts generated by similar processes as drifting pulsation structures observed during solar flares?

Marian **Karlicky**
A&A **2017**
<https://arxiv.org/pdf/1704.08532.pdf>

RECURRENT SOLAR JETS INDUCED BY A SATELLITE SPOT AND MOVING MAGNETIC FEATURES

Jie **Chen**¹, Jiangtao Su¹, Zhiqiang Yin¹, T. G. Priya^{1,2}, Hongqi Zhang¹, Jihong Liu³, Haiqing Xu¹, and Sijie Yu¹
2015 ApJ 815 71

Unresolved Fine-scale Structure in Solar Coronal Loop-tops

E. **Scullion**^{1,2}, L. Rouppe van der Voort¹, S. Wedemeyer¹, and P. Antolin
2014 ApJ 797 36
<http://arxiv.org/pdf/1409.1920v1.pdf>

1-5 July

Comparative case study of two methods to assess the eruptive potential of selected active regions

[Francesca Zuccarello](#)¹, [Iliaria Ermolli](#), [Marianna B. Korsos](#), [Fabrizio Giorgi](#), [Salvo L. Guglielmino](#), [Robertus Erdelyi](#), [Paolo Romano](#)

Research in Astronomy and Astrophysics 2021

<https://arxiv.org/pdf/2110.01272.pdf>

Differential Emission Measure Evolution as a Precursor of Solar Flares

C. [Gontikakis](#) (1), [I. Kontogiannis](#) (2), [M.K. Georgoulis](#) (1,3), [C. Guennou](#) (4), [P. Syntelis](#) (5), [S.H. Park](#) (6), [E. Buchlin](#)

2020

<https://arxiv.org/pdf/2011.06433.pdf>

2 July M5.6 flare

Full velocities and propagation directions of coronal mass ejections inferred from simultaneous full-disk imaging and Sun-as-a-star spectroscopic observations

[Hong-peng Lu](#), [Hui Tian](#), [He-chao Chen](#), [Yu Xu](#), [Zhen-yong Hou](#), [Xian-yong Bai](#), [Guang-yu Tan](#), [Zi-hao Yang](#), [Jie Ren](#)

ApJ 2023

<https://arxiv.org/pdf/2305.08765.pdf>

Magnetohydrodynamics evolution of three-dimensional magnetic null in NOAA active region 11515 initiated using non-force-free field extrapolation

Sanjay [Kumar](#), Avijeet Prasad, Ranadeep Sarkar, and Ramit Bhattacharyya

Front. Astron. Space Sci. 9:1039061. 2022

<https://arxiv.org/pdf/2210.03957.pdf>

doi: 10.3389/fspas.2022.1039061

<https://www.frontiersin.org/articles/10.3389/fspas.2022.1039061/pdf>

Blobs in a Solar EUV Jet

Jie [Chen](#), Robertus Erdelyi, Jijia Liu, Yuanyong Deng, Fionnlagh Dover, Qingmin Zhang, Mei Zhang, Jiangtao Su, and Leping Li

Front. Astron. Space Sci. 8:786856. doi: 10.3389/fspas.2021.786856, 2022

<https://www.frontiersin.org/articles/10.3389/fspas.2021.786856/pdf>

<https://doi.org/10.3389/fspas.2021.786856>

Direct Observation of A Large-scale CME Flux Rope Event Arising from an Unwinding Coronal Jet

[Hechao Chen](#), [Jiayan Yang](#), [Junchao Hong](#), [Haidong Li](#), [Yadan Duan](#)

ApJ 2021

<https://arxiv.org/pdf/2102.13336.pdf>

High Resolution Observations of Solar Flares

Haimin [Wang](#)

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

Flare-productive active regions

Shin [Toriumi](#), [Haimin Wang](#)

Living Reviews in Solar Physics 2019

<https://arxiv.org/pdf/1904.12027.pdf>

Review

On Solar Recurrent Coronal Jets: Coronal Geysers as Sources of Electron Beams and Interplanetary Type-III Radio Bursts

Alin Razvan [Paraschiv](#) and Alina Donea

2019 ApJ 873 110

<https://doi.org/10.3847/1538-4357/ab04a6>

<https://arxiv.org/pdf/1903.04682.pdf>

Fourier Power Spectra of Solar Noise Storms

Marian **Karlický**, Ján Rybák, Christian Monstein

Solar Physics October 2018, 293:143

sci-hub.tw/10.1007/s11207-018-1367-5

Evaluation of Applicability of a Flare Trigger Model based on Comparison of Geometric Structures

Yumi **Bamba**, [Kanya Kusano](#)

ApJ 2018

<https://arxiv.org/pdf/1802.00134.pdf>

Magnetic Flux Cancellation as the Trigger of Solar Coronal-Hole Coronal Jets

Navdeep K. **Panesar**, [Alphonse C. Sterling](#), [Ronald L. Moore](#)

ApJ 2018

<https://arxiv.org/pdf/1801.05344.pdf>

Are chains of type I radio bursts generated by similar processes as drifting pulsation structures observed during solar flares?

Marian **Karlický**

A&A 2017

<https://arxiv.org/pdf/1704.08532.pdf>

A Complex Solar Coronal Jet with Two Phases

Jie **Chen**, Jiangtao Su, Yuanyong Deng, E. R. Priest

ApJ 840 54 2017

<https://arxiv.org/pdf/1704.02072.pdf>

<https://iopscience.iop.org/article/10.3847/1538-4357/aa6c59/pdf>

A blow out jet caused by the eruption of a magnetic flux rope revealed by forced field extrapolation

Xiaoshuai **Zhu**, Huaning Wang, Xin Cheng, Chong Huang

ApJL 2017

<https://arxiv.org/pdf/1703.08992.pdf>

Investigation of recurrent EUV jets from highly dynamic magnetic field region

Navin **Chandra**, Ramesh Chandra, Yang Guo, Tetsuya Magara, Ivan Zhelyazkov, Young-Jae Moon, Wahab Uddin

Astrophysics and Space Science January 2017, 362:10

Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ 2016

<https://arxiv.org/pdf/1611.05047v1.pdf>

Observations of solar X-ray and EUV jets and their related phenomena **Review**

Davina **Innes**, Radoslav Bucik, Li-Jia Guo, Nariaka Nitte

Astronomische Nachrichten 2016

<http://arxiv.org/pdf/1603.03258v1.pdf>

Microwave Type III Pair Bursts in Solar Flares

Baolin **Tan**, Hana Meszarosova, Marian Karlický, Guangli Huang, Chengming Tan

ApJ 2016
<http://arxiv.org/pdf/1601.05312v1.pdf>

Observations of a Series of Flares and Associated Jet-like Eruptions Driven by the Emergence of Twisted Magnetic Fields

Eun-Kyung [Lim](#), Vasyl Yurchyshyn, Sung-Hong Park, Sujin Kim, Kyung-Suk Cho, Pankaj Kumar, Jongchul Chae, Heesu Yang, Kyuhyoun Cho, Donguk Song, Yeon-Han Kim

ApJ 2015
<http://arxiv.org/pdf/1512.01330v1.pdf>

Type II and Type III Radio Bursts and their Correlation with Solar Energetic Proton Events

L.M. [Winter](#), K. Ledbetter

ApJ 2015
<http://arxiv.org/pdf/1507.01620v1.pdf>

Unresolved Fine-scale Structure in Solar Coronal Loop-tops

E. [Scullion](#)^{1,2}, L. Rouppe van der Voort¹, S. Wedemeyer¹, and P. Antolin

2014 ApJ 797 36
<http://arxiv.org/pdf/1409.1920v1.pdf>

Observations of Photospheric Vortical Motions During the Early Stage of Filament Eruption

Sajal Kumar [Dhara](#), B. Ravindra, Ravinder Kumar Banyal

Solar Phys. 2014
<http://arxiv.org/pdf/1410.3592v1.pdf>

The Relation Between Large-Scale Coronal Propagating Fronts and Type II Radio Bursts

Nariaki V. [Nitta](#), Wei Liu, Nat Gopalswamy, Seiji Yashiro

Solar Phys., 2014
http://www.lmsal.com/nitta/publ/SP_typeII_20140904.pdf
<http://arxiv.org/pdf/1409.4754v1.pdf> File

Evolution of a Magnetic Flux Rope and its Overlying Arcade Based on Nonlinear Force-free Field Extrapolations

Ju [Jing](#), Chang Liu, Jeongwoo Lee, Shuo Wang, Thomas Wiegmann, Yan Xu, and Haimin Wang
ApJ 784 L13, 2014

Sunspot splitting triggering an eruptive flare

Rohan E. [Louis](#), Klaus G. Puschmann, Bernhard Kliem, Horst Balthasar, Carsten Denker
E-print, Nov 2013; A&A 562, A110 (2014)

STUDY OF RAPID FORMATION OF A δ SUNSPOT ASSOCIATED WITH THE 2012 JULY 2 C7.4 FLARE USING HIGH-RESOLUTION OBSERVATIONS OF THE NEW SOLAR TELESCOPE

Haimin [Wang](#)¹, Chang Liu¹, Shuo Wang¹, Na Deng¹, Yan Xu¹, Ju Jing¹, and Wenda Cao
2013 ApJ 774 L24

3 July

Automatic detection of Interplanetary Coronal Mass Ejections from in-situ data: a deep learning approach

Gautier [Nguyen](#), [Nicolas Aunai](#), [Dominique Fontaine](#), [Erwan Le Pennec](#), [Joris Van den Bossche](#), [Alexis Jeandet](#), [Brice Bakkali](#), [Louis Vignoli](#), [Bruno Regaldo-Saint Blancar](#)

2019
<https://arxiv.org/pdf/1903.10780.pdf>

A STEREO Survey of Magnetic Cloud Coronal Mass Ejections Observed at Earth in 2008-2012

Brian E. [Wood](#), Chin-Chun Wu, Ronald P. Lepping, [Teresa Nieves-Chinchilla](#), [Russell A. Howard](#), [Mark G. Linton](#), [Dennis G. Socker](#)

Astrophysical Journal Supplement 2017 File

<https://arxiv.org/pdf/1701.01682v1.pdf>

Systematic variations of macrospicule properties observed by SDO/AIA over half a decade

T. S. [Kiss](#), N. Gyenge, R. Erdelyi

2016

<https://arxiv.org/pdf/1612.02224v1.pdf>

Radio Observation of Solar-Activity-Related mHz Oscillations

N. V. [Hiep](#), P. T. Nhung, P. Darriulat, P. N. Diep, P. T. Anh, P. N. Dong, D. T. Hoai, N. T. Thao
Solar Physics, March 2014, Volume 289, Issue 3, pp 939-950

3-6 July

Observations of white-light flares in NOAA active region 11515: high occurrence rate and relationship with magnetic transients

Y. L. [Song](#), [H. Tian](#), [M. Zhang](#), [M. D. Ding](#)

A&A 2018

<https://arxiv.org/pdf/1801.04371.pdf>

4 July – 16:46: M1.8 вспышка, **пересвет** на STEREO-A, $A=16^*2/312=0,1$
22:16: M4.6 вспышка, **пересвет** на STEREO-A, $A=16^*2/312=0,1$

4 July - a significant increase in the background x-ray level; 16:39 - CME associated with the M1/2n flare from Region 1513

Flare Induced Sunquake Signatures in the Ultraviolet as Observed by the Atmospheric Imaging Assembly

[Sean Quinn](#), [Mihalis Mathioudakis](#), [Christopher J. Nelson](#), [Ryan O. Milligan](#), [Aaron Reid](#), [David B. Jess](#)

ApJ 2021

<https://arxiv.org/pdf/2105.05704.pdf>

The configuration and failed eruption of a complex magnetic flux rope above a δ sunspot region

[Lijuan Liu](#), [Jiajia Liu](#), [Jun Chen](#), [Yuming Wang](#), [Guoqiang Wang](#), [Zhenjun Zhou](#), [Jun Cui](#)

A&A 2021

<https://arxiv.org/pdf/2102.06005.pdf>

A **Catalog** of Type II Radio Bursts Observed by Wind/WAVES and their Statistical Properties

Nat [Gopalswamy](#), [Pertti Mäkelä](#), [Seiji Yashiro](#)

Sun and Geosphere 2019

<https://arxiv.org/ftp/arxiv/papers/1912/1912.07370.pdf> File

Two Types of Solar Confined Flares

Ting [Li](#), [Lijuan Liu](#), [Yijun Hou](#), [Jun Zhang](#)

ApJS 2019

<https://arxiv.org/pdf/1907.04510.pdf>

Frequency rising sub-THz emission from solar flare ribbons

E.P. [Kontar](#), [G.G. Motorina](#), [N.L.S. Jeffrey](#), [Y.T. Tsap](#), [G.D. Fleishman](#), [A.V. Stepanov](#)

A&A 2018
<https://arxiv.org/pdf/1810.03922.pdf>

Database of episode-integrated solar energetic proton fluences

Zachary D. **Robinson**^{1*}, James H. Adams Jr.², Michael A. Xapsos³ and Craig A. Stauffer
J. Space Weather Space Clim. **2018**, 8, A24
<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170061.pdf>

New Probabilistic Model For Episode Integrated Fluences of Protons Using Episodes From 1973-2013

Zachary D. **Robinson**
Thesis (2015) **2017**
<https://arxiv.org/pdf/1711.04391.pdf>

A STEREO Survey of Magnetic Cloud Coronal Mass Ejections Observed at Earth in 2008-2012

Brian E. **Wood**, Chin-Chun Wu, Ronald P. Lepping, Teresa Nieves-Chinchilla, Russell A. Howard, Mark G. Linton, Dennis G. Socker
Astrophysical Journal Supplement **2017 File**
<https://arxiv.org/pdf/1701.01682v1.pdf>

Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima
ApJ **2016**
<https://arxiv.org/pdf/1611.05047v1.pdf>

A large-scale search for evidence of quasi-periodic pulsations in solar flares

A. R. **Inglis**, J. Ireland, B. R. Dennis, L. A. Hayes, P. T. Gallagher
ApJ **2016**
<https://arxiv.org/pdf/1610.07454v1.pdf>

The Energetics of White-light Flares Observed by SDO/HMI and RHESSI

Nengyi **Huang**, Yan Xu, Haimin Wang
Research in Astronomy and Astrophysics **2016**
<http://arxiv.org/pdf/1608.06015v1.pdf>

On the origin of 140 GHz emission from the 4 July 2012 solar flare

Yuriy T. **Tsap**, Victoria V. Smirnova, Alexander S. Morgachev, Galina G. Motorina, Eduard P. Kontar, Valery G. Nagnibeda, Polina V. Strelakova
Advances in Space Research, V. 57, I. 7, p. 1449-1455 **2016**; DOI: 10.1016/j.asr.2015.12.037
<http://arxiv.org/pdf/1604.01530v1.pdf>

4-5 July – Forbush от корональной дыры

Thermal plasma diagnostics and the origin of sub-THz solar bursts

Yuriy **Tsap**_{y1,2}, Galina Motorina_{z2}, Viktoria Smirnovax_{2,3}, Alexander Morgachev_{2,4}, Valeriy Nagnibedak₅, Sergey Kuznetsov_{__2,4}, and Vladimir Ryzhovyy₆
CESRA **2016**, p.101
http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v3.pdf

5 July – 20:16: M1.6 **пересвет** $A=26 \cdot 2/312=0,17 \leftarrow 16s \ 8s \rightarrow A=26/312=0.083$
21:46: M1.6 вспышка, **пересвет** на STEREO-A, $A=7,5 \cdot 2/312=0,05$

2012-07-05 Вспышки всего дня (кроме самого конца):

Пересвет не виден на фоне структур. STEREO-A залимб и прилимб.

Enhanced three-minute oscillation above a sunspot during a solar flare

Ya [Wang](#), [Lyndsay Fletcher](#), [Sargam Mulay](#), [Haisheng Ji](#), [Wenda Cao](#)

ApJ 2023

<https://arxiv.org/pdf/2311.17223.pdf>

Quasi-Periodic Energy Release in a Three-Ribbon Solar Flare

[Ivan Zimovets](#), [Ivan Sharykin](#) & [Ivan Myshyakov](#)

Solar Physics volume 296, Article number: 188 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01936-9.pdf>

<https://doi.org/10.1007/s11207-021-01936-9>

High-resolution He I 10830 Å Narrowband Imaging for an M-class Flare. III. EUV Late Phase

Ya [Wang](#)^{1,2}, [Haisheng Ji](#)^{1,3}, [Alexander Warmuth](#)⁴, [Ying Li](#)¹, and [Wenda Cao](#)⁵

2020 ApJ 905 126

<https://doi.org/10.3847/1538-4357/abc47a>

The Lyman-alpha Emission in Solar Flares. I. a Statistical Study on Its Relationship with the 1--8 Å Soft X-ray Emission

[Zhichen Jing](#), [Wuqi Pan](#), [Yukun Yang](#), [Dechao Song](#), [Jun Tian](#), [Y. Li](#), [X. Cheng](#), [Jie Hong](#), [M. D. Ding](#)

ApJ 2020

<https://arxiv.org/pdf/2009.10358.pdf>

The Statistical Relationship between White-light Emission and Photospheric Magnetic Field Changes in Flares

[J. S. Castellanos Durán](#), [L. Kleint](#)

ApJ 2020

<https://arxiv.org/pdf/2007.02954.pdf>

Frequency rising sub-THz emission from solar flare ribbons

E.P. [Kontar](#), [G.G. Motorina](#), [N.L.S. Jeffrey](#), [Y.T. Tsap](#), [G.D. Fleishman](#), [A.V. Stepanov](#)

A&A 2018

<https://arxiv.org/pdf/1810.03922.pdf>

High-resolution He I 10830 Å Narrowband Imaging for an M-class Flare. II. Multiple Hot Channels: Their Origin and Destination

Ya [Wang](#)^{1,2}, [Yingna Su](#)^{1,3}, [Jinhua Shen](#)⁴, [Xu Yang](#)⁵, [Wenda Cao](#)⁵, and [Haisheng Ji](#)^{1,3}

2018 ApJ 859 148 DOI [10.3847/1538-4357/aac0f7](https://doi.org/10.3847/1538-4357/aac0f7)

Millimeter and X-Ray Emission from the 5 July 2012 Solar Flare

Y. T. [Tsap](#), V. V. Smirnova, G. G. Motorina, A. S. Morgachev, S. A. Kuznetsov, V. G. Nagnibeda, V. S. Ryzhov

Solar Physics March 2018, 293:50

<http://sci-hub.tw/http://link.springer.com/10.1007/s11207-018-1269-6>

A time dependent relation between EUV solar flare light-curves from lines with differing formation temperatures

Edward M.B. [Thiemann](#), Francis G. Eparvier and Thomas N. Woods

J. Space Weather Space Clim. 2017, 7, A36

<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170050.pdf>

<https://arxiv.org/pdf/1703.02995.pdf>

High-resolution Observation of Downflows at One End of a Pre-eruption Filament

Qin [Li](#), Na Deng, Ju Jing, Haimin Wang

2017

<https://arxiv.org/pdf/1705.08003.pdf>

Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ 2016

<https://arxiv.org/pdf/1611.05047v1.pdf>

High resolution He I 10830 Å narrow-band imaging of an M-class flare. I - analysis of sunspot dynamics during flaring

Ya **Wang**, Yingna Su, Zhenxiang Hong, Zhicheng Zeng, Kaifan Ji, Philip R. Goode, Wenda Cao, Haisheng Ji

ApJ 2016

<https://arxiv.org/pdf/1610.09227v1.pdf>

The Energetics of White-light Flares Observed by SDO/HMI and RHESSI

Nengyi **Huang**, Yan Xu, Haimin Wang

Research in Astronomy and Astrophysics 2016

<http://arxiv.org/pdf/1608.06015v1.pdf>

Global Energetics of Solar Flares: IV. Coronal Mass Ejection Energetics

Markus J. **Aschwanden**

ApJ 2016

<http://arxiv.org/pdf/1605.04952v1.pdf> File

http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf

6 July – 01:41: M2.9 вспышка, **пересвет** на STEREO-A, $A=23*2/312=0,15$
03:01: M1.0 вспышка, **пересвет** на STEREO-A, $A=12*2/312=0,08$
08:26: M1.5 вспышка, **пересвет** на STEREO-A, $A=30*2/312=0,19$
10:31: M1.8 вспышка, **пересвет** на STEREO-A, $A=20*2/312=0,13$
13:31: M1.2 вспышка, **пересвет** на STEREO-A, $A=25*2/312=0,16$
18:56: M1.3 вспышка, **пересвет** на STEREO-A, $A=12*2/312=0,08$
23:10: X1.1 вспышка, **пересвет** на STEREO-A, $A=66*2/312= 0,42$

6 July – 23:05, X1.1 flare (S17W~55), strong hard-spectrum microwaves, coronal wave at STEREO-A, CME, protons **Gamma**

Strongest coronal magnetic fields in solar cycles 23-24: probing, statistics, and implications

V. V. Fedenev, S. A. Anfinogentov, G. D. Fleishman

ApJ 2023

<https://arxiv.org/pdf/2301.08922.pdf>

Global energetics of solar flares. XIII. The Neupert effect and acceleration of coronal mass ejections

Markus J. **Aschwanden**

ApJ 2021

<https://arxiv.org/pdf/2112.07759.pdf> File

СВЯЗЬ МЕЖДУ ДЛИТЕЛЬНОСТЬЮ И ВЕЛИЧИНОЙ УСКОРЕНИЯ КОРОНАЛЬНЫХ ВЫБРОСОВ МАССЫ

Струминский А. Б., Григорьева И. Ю., Логачев Ю. И., Садовский А. М.

ГЕОМАГНЕТИЗМ И АЭРОНОМИЯ Том: 61Номер: 6 Год: 2021 Страницы: 683-693

DOI: [10.31857/S001679402105014X](https://doi.org/10.31857/S001679402105014X)

High Resolution Observations of Solar Flares

Haimin **Wang**

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

Relationships between Photospheric Vertical Electric Currents and Hard X-Ray Sources in Solar Flares: Statistical Study

I.V. [Zimovets](#), [I.N. Sharykin](#), [W.Q. Gan](#)

ApJ 2020

<https://arxiv.org/pdf/2002.06646.pdf>

Gamma-ray lines in solar flares with proton spectra measured by PAMELA experiment

A L [Lysenko](#)¹, E A Bogomolov¹, G I Vasiliev¹ and E P Ovchinnikova¹

[Journal of Physics: Conference Series](#), Volume 1400, Issue 2 (2019) 022042

<https://iopscience.iop.org/article/10.1088/1742-6596/1400/2/022042/pdf>

HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE

Thesis Catalog (2010-2017)

[Allafort](#), A. J.

(2018). PhD thesis, Stanford Univ. **File**

https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf

Direction-finding Analysis of the 2012 July 6 Type II Solar Radio Burst at Low Frequencies

Pertti [Mäkelä](#)^{1,2}, Nat Gopalswamy², and Sachiko Akiyama

2018 ApJ 867 40

sci-hub.tw/10.3847/1538-4357/aae2b6

Detection of Quasi-Periodic Pulsations in Solar EUV Time Series

M. [Dominique](#), A. N. Zhukov, L. Dolla, A. Inglis, G. Lapenta

[Solar Physics](#) April 2018, 293:61

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1281-x.pdf>

Relationship between Intensity of White-light Flares and Proton Flux of Solar Energetic Particles

Nengyi [Huang](#)^{1,2}, Yan Xu^{1,2}, and Haimin Wang

2018 Res. Notes AAS 2 7

<http://iopscience.iop.org/article/10.3847/2515-5172/aaa602>

<https://arxiv.org/pdf/1801.04316.pdf>

Observations of white-light flares in NOAA active region 11515: high occurrence rate and relationship with magnetic transients

Y. L. [Song](#), [H. Tian](#), [M. Zhang](#), [M. D. Ding](#)

A&A 2018

<https://arxiv.org/pdf/1801.04371.pdf>

Characteristics of Sustained >100 γ -ray Emission Associated with Solar Flares

G. H. [Share](#), R. J. Murphy, A. K. Tolbert, B. R. Dennis, S. M. White, R. A. Schwartz, and A. J. Tylka

ApJ Supplement 2017

http://www.astro.umd.edu/~share/publications/share_2017.pdf **File**

Flare SOL2012-07-06: On the Origin of the Circular Polarization Reversal Between 17 GHz and 34 GHz

A. [Altıntsev](#), N. Meshalkina, I. Myshyakov, V. Pal'shin, G. Fleishman

[Solar Physics](#) September 2017, 292:137

The Abundance of Helium in the Source Plasma of Solar Energetic Particles

Donald V. [Reames](#)

Solar Phys. 2017
<https://arxiv.org/ftp/arxiv/papers/1708/1708.05034.pdf>

Transient Mass Loss Analysis of Solar Observations using Stellar Methods

M. K. **Crosley**, R. A. Osten, C. Norman

2017

<https://arxiv.org/pdf/1707.01928.pdf>

Measuring the magnetic field of a trans-equatorial loop system using coronal seismology

David M. **Long**, Gherardo Valori, David Pérez-Suárez, Richard J. Morton, Alberto Marcos Vásquez

A&A 2017

<https://arxiv.org/pdf/1703.10020.pdf>

Improved SOT (Hinode mission) high resolution solar imaging observations

Hadis **Goodarzi**, Serge Koutchmy, Ali Adjabshirizadeh

2015

<http://arxiv.org/pdf/1506.08265v1.pdf>

Observation of solar high energy gamma and X-ray emission and solar energetic particles

Alexei **Struminsky**, Weiqun Gan

24th European Cosmic Ray Symposium, Kiel, September 2014, 2015

<https://iopscience.iop.org/article/10.1088/1742-6596/632/1/012081/pdf>

Moreton Waves and EIT Waves Related to the Flare Events of June 3, 2012 and July 6, 2012

A. G. **Admiranto**, R. Priyatikanto, U. Yus'an, E. Puspitaningrum

International Conference on Mathematics and Natural Sciences 2014

<http://arxiv.org/pdf/1502.04039v1.pdf>

Particle Acceleration in Plasmoid Ejections Derived from Radio Drifting Pulsating Structures

N. **Nishizuka**¹, M. Karlický², M. Janvier³, and M. Bárta

2015 ApJ 799 126

<http://arxiv.org/pdf/1412.7904v1.pdf>

Dynamics of Microwave Sources Associated with the Neutral Line and the Magnetic-Field Parameters of Sunspots as a Factor in Predicting Large Flares

V. E. **Abramov-Maximov**, V. N. Borovik, L. V. Opeikina, A. G. Tlatov

Solar Phys., 2014

Moreton Waves Related to the Flare Event in 3 June 2012 and 6 July 2012

Agustinus Gunawan **Admiranto**, Rhorom Priyatikanto

Journal of the Korean Astronomical Society (<http://jkas.kas.org>), 2014

<http://arxiv.org/pdf/1408.6677v1.pdf>

Quasi-Periodic Pulsations with Varying Period in Multi-Wavelength Observations of an X-class Flare

Jing **Huang**¹, Baolin Tan¹, Yin Zhang¹, Marian Karlický², and Hana Mészárosóvá

2014 ApJ 791 44

Radio Observation of Solar-Activity-Related mHz Oscillations

N. V. **Hiep**, P. T. Nhung, P. Darriulat, P. N. Diep, P. T. Anh, P. N. Dong, D. T. Hoai, N. T. Thao

Solar Physics, March 2014, Volume 289, Issue 3, pp 939-950

Study of Two Successive Three-Ribbon Solar Flares on 2012 July 6

Haimin **Wang**, Chang Liu, Na Deng, Zhicheng Zeng, Yan Xu, Ju Jing and Wenda Cao
E-print, Dec 2013; ApJL
<http://arxiv.org/pdf/1312.6649v1.pdf>

Solar Flare Impulsive Phase Emission Observed with SDO/EVE

Michael B. **Kennedy**¹, Ryan O. Milligan^{1,2,3}, Mihalis Mathioudakis¹, and Francis P. Keenan
2013 ApJ 779 84
<http://arxiv.org/abs/1310.4649>

HIGH-ENERGY GAMMA-RAY EMISSION FROM SOLAR FLARES: SUMMARY OF FERMI LAT DETECTIONS AND ANALYSIS OF TWO M-CLASS FLARES

M. **Ackermann**², M. Ajello³, A. Albert⁴, A. Allafort^{5,1}, L. Baldini⁶, G. Barbiellini^{7,8}, D. Bastieri et al.
Fermi-LAT collaboration
E-print, April 2013, File; ApJ

THE FIRST GROUND LEVEL ENHANCEMENT EVENT OF SOLAR CYCLE 24: DIRECT OBSERVATION OF SHOCK FORMATION AND PARTICLE RELEASE HEIGHTS

N. **Gopalswamy**¹, H. Xie^{1,2}, S. Akiyama^{1,2}, S. Yashiro^{1,2}, I. G. Usoskin³, and J. M. Davila
2013 ApJ 765 L30, preprint File

7 July – 03:26: M1.2 вспышка, **пересвет** на STEREO-A, $A=25 \cdot 2/313=0.16$
04:31: C6.7 вспышка, **пересвет** на STEREO-A, $A=8 \cdot 2/313=0.051$
08:36: M1.0 вспышка, **пересвет** на STEREO-B, $B=0,032$
11:06: M2.6 вспышка, **пересвет** на STEREO-A, $A=22 \cdot 2/313=0.14$
14:36: C3.0 вспышка, **пересвет** на STEREO-A, $A=6,5 \cdot 2/313=0.042$

7 July Sustained Gamma-

Cold Solar Flares. I. Microwave Domain

Alexandra L. **Lysenko**¹, Stephen M. White², Dmitry A. Zhdanov³, Nataliia S. Meshalkina³, Aleksander T. Altyntsev³, Galina G. Motorina^{1,4,5}, and Gregory D. Fleishman^{6,7}
2023 ApJ 954 122
<https://iopscience.iop.org/article/10.3847/1538-4357/acea20/pdf>

The Common Origin of High-energy Protons in Solar Energetic Particle Events and Sustained Gamma-ray Emission from the Sun

N. **Gopalswamy**, [S. Yashiro](#), [P. Makela](#), [H. Xie](#), [S. Akiyama](#)
ApJ 2021
<https://arxiv.org/ftp/arxiv/papers/2105/2105.01206.pdf>

Interplanetary Radio Emission: A Summary of Recent Results

Review

Nat **Gopalswamy**
Journal of Computational and Interdisciplinary Science 2020
<https://arxiv.org/ftp/arxiv/papers/2008/2008.09222.pdf> File

Comparing Long-Duration Gamma-Ray Flares and High-Energy Solar Energetic Particles

G. A. **de Nolfo**, [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevskaya](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)
ApJ 2019
<https://arxiv.org/pdf/1905.12878.pdf> File

Extreme Kinematics of the 2017 September 10 Solar Eruption and the Spectral Characteristics of the Associated Energetic Particles

N. **Gopalswamy**, [S. Yashiro](#), [P. Makela](#), [H. Xie](#), [S. Akiyama](#), [C. Monstein](#)

ApJL 2018
<https://arxiv.org/ftp/arxiv/papers/1807/1807.09906.pdf>

Exploring the potential of microwave diagnostics in SEP forecasting: The occurrence of SEP events

Pietro **Zucca**, Marlon Núñez and Karl-Ludwig Klein
J. Space Weather Space Clim., 7, A13 (2017)
<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170001.pdf>

Origin and Structures of Solar Eruptions I: Magnetic Flux Rope (Invited **Review**)

X. **Cheng**, Y. Guo, M. D. Ding
SCIENCE CHINA Earth Sciences 2017 File
<https://arxiv.org/pdf/1705.08198.pdf>

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia **Alzate** and Huw Morgan
2017 ApJ 840 103
<https://iopscience.iop.org/article/10.3847/1538-4357/aa6caa/pdf>

Solar Activity from 2006 to 2014 and Short-term Forecasts of Solar Proton Events Using the ESPERTA Model

T. **Alberti**¹, M. Laurenza², E. W. Cliver³, M. Storini², G. Consolini², and F. Lepreti
2017 ApJ 838 59 File
<http://sci-hub.cc/10.3847/1538-4357/aa5cb8>

Dynamic SEP event probability forecasts

S. W. **Kahler** and A. Ling
Space Weather Volume 13, Issue 10 (pages 665–675) 2015 DOI: 10.1002/2015SW001222

Observational Characteristics of **CMEs without Low Coronal Signatures**

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans
2014
<http://arxiv.org/pdf/1409.1422v1.pdf>

Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. **Gopalswamy**
E-print, Jan 2013, **File**; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, 2012

8 July – 05:46: M1.2 вспышка, **пересвет** на STEREO-A, $A=15*2/313=0,1$
10:51: M1.1 вспышка, **пересвет** на STEREO-A, $A=14*2/313=0,09$
12:11: M1.4 вспышка, **пересвет** на STEREO-A, $A=18*2/313=0,12$
16:30: M6.9 вспышка, **пересвет** на STEREO-A, $A=50*2/313= 0,32$

8 July – 16:27, M6.9 flare (S17W74), trans-equatorial eruption followed by a 304 A large south filament eruption, coronal wave at STEREO-A, CME, protons; similar to the 6 July event

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

An Observational Revisit of Stationary Type IV Solar Radio Bursts

[Maoshui Lv](#), [Yao Chen](#), [V. Vasanth](#), [Mohd Shazwan Radzi](#), [Zamri Zainal Abidin](#) & [Christian Monstein](#)
Solar Physics volume 296, Article number: 38 (2021)
<https://link.springer.com/content/pdf/10.1007/s11207-021-01769-6.pdf>

Fourier Power Spectra of Solar Noise Storms

Marian [Karlický](#), Ján Rybák, Christian Monstein

[Solar Physics](#) October 2018, 293:143

sci-hub.tw/10.1007/s11207-018-1367-5

Statistics of "Cold" Early Impulsive Solar Flares in X-ray and Microwave domains

Alexandra L. [Lysenko](#), [Alexander T. Altyntsev](#), [Natalia S. Meshalkina](#), [Dmitriy Zhdanov](#), [Gregory D. Fleishman](#)

2018

<https://arxiv.org/pdf/1802.09288.pdf>

Resolving the Fan-Spine Reconnection Geometry of a Small-Scale Chromospheric Jet Event with the New Solar Telescope

Zhicheng [Zeng](#), Bin Chen, [Haisheng Ji](#), [Philip R. Goode](#), [Wenda Cao](#)

2016

<http://arxiv.org/pdf/1602.04237v1.pdf>

How Common are Hot Magnetic Flux Ropes in the Low Solar Corona? A Statistical Study of EUV Observations

A. [Nindos](#), S. Patsourakos, A. Vourlidas, C. Tagikas

ApJ 2015

<http://arxiv.org/pdf/1507.03766v1.pdf>

When and how does a Prominence-like Jet Gain Kinetic Energy?

Jiajia [Liu](#), Yuming Wang¹, Rui Liu, Quanhao Zhang, Kai Liu, Chenglong Shen, and S. Wang

2014 ApJ 782 94

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Polarization Emission of Millimeter Activity at the Sun (POEMAS): New Circular Polarization Solar Telescopes at Two Millimeter Wavelength Ranges

Adriana [Valio](#), P. Kaufmann, C. G. Giménez de Castro, J.-P. Raulin, L. O. T. Fernandes, A. Marun
[Solar Physics](#), April 2013, Volume 283, Issue 2, pp 651-665

THE FIRST GROUND LEVEL ENHANCEMENT EVENT OF SOLAR CYCLE 24: DIRECT OBSERVATION OF SHOCK FORMATION AND PARTICLE RELEASE HEIGHTS

N. [Gopalswamy](#)¹, H. Xie^{1,2}, S. Akiyama^{1,2}, S. Yashiro^{1,2}, I. G. Usoskin³, and J. M. Davila

2013 ApJ 765 L30, preprint [File](#)

8-9 Jul

Multi-wavelength and Dual-perspective Observations of Eruption and Untwisting of Two Homologous Magnetic Flux Ropes

De-Chao [Song](#), [Y. Li](#), [Y. Su](#), [M. D. Ding](#), [W.Q. Gan](#)

ApJ 2021

<https://arxiv.org/pdf/2109.11187.pdf>

9 July – 23:11: M1.1 вспышка, **пересвет** на STEREO-B, $B=11*2/297=0,05$

Сомнительный, верхний предел, прилимб на STEREO-B

9 July – продолжение медленного подъема of the large south filament eruption

Global energetics of solar flares. XIII. The Neupert effect and acceleration of coronal mass ejections

[Markus J. Aschwanden](#)

ApJ 2021

<https://arxiv.org/pdf/2112.07759.pdf> File

9-10 July – Dst ~-72

Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. **Gopalswamy**

E-print, Jan 2013, **File**; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, **2012**

10 July – 05:16: M1.7 вспышка, **пересвет** на STEREO-B, $B=8*2/296=0,07$
06:31: M2.0 вспышка, **пересвет** на STEREO-B, $B=12*2/296=0,08$

Сомнительные, верхний предел, прилиб на STEREO-B

10 July

Cold Solar Flares. I. Microwave Domain

Alexandra L. **Lysenko**¹, Stephen M. White², Dmitry A. Zhdanov³, Nataliia S. Meshalkina³, Aleksander T. Altyntsev³, Galina G. Motorina^{1,4,5}, and Gregory D. Fleishman^{6,7}

2023 ApJ 954 122

<https://iopscience.iop.org/article/10.3847/1538-4357/acea20/pdf>

Improved CGEM Electric Field Inversion for HMI Active Regions

Xudong **Sun**¹, George Fisher², and Todd Hoeksema³ (for the CGEM Team)

HMI Science Nuggets, #190 **2023**

<http://hmi.stanford.edu/hminuggets/?p=4092>

An Observational Revisit of Stationary Type IV Solar Radio Bursts

[Maoshui Ly](#), [Yao Chen](#), [V. Vasanth](#), [Mohd Shazwan Radzi](#), [Zamri Zainal Abidin](#) & [Christian Monstein](#)
Solar Physics volume 296, Article number: 38 (**2021**)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01769-6.pdf>

Microwave diagnostics of magnetic field strengths in solar flare loops

[Rui Zhu](#), [Baolin Tan](#), [Yingna Su](#), [Hui Tian](#), [Yu Xu](#), [Xingyao Chen](#), [Yongliang Song](#), [Guangyu Tan](#)

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R. F. Hidalgo **Ramirez**, A. Morosi, D. Silva, P. J. A. Simoões, A. Valio

Solar Physics August **2019**, 294:108

sci-hub.se/10.1007/s11207-019-1503-x

THE 10 JULY 2012 EVENT: AN EXAMPLE OF NARROWBAND GYROSYNCHROTRON BURST?

[Meshalkina](#)¹ N.S., [Fleishman](#)^{2,3} G.D., [Altyntsev](#)¹ A.T.

Астрономия-2018 Том 2 Солнечно-земная физика – современное состояние и перспективы С.141

<http://www.izmiran.ru/library/eaas2018/eaas-2018-2.pdf>

A large-scale search for evidence of quasi-periodic pulsations in solar flares

A. R. **Inglis**, J. Ireland, B. R. Dennis, L. A. Hayes, P. T. Gallagher

ApJ **2016**

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Global Energetics of Solar Flares: III. Non thermal Energies

Markus J. **Aschwanden**, Gordon Holman, Aidan O'Flannagain, Amir Campi, James M. McTiernan, Eduard Konter

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Radio Observation of Solar-Activity-Related mHz Oscillations

N. V. **Hiep**, P. T. Nhung, P. Darriulat, P. N. Diep, P. T. Anh, P. N. Dong, D. T. Hoai, N. T. Thao
Solar Physics, March 2014, Volume 289, Issue 3, pp 939-950

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Comparative case study of two methods to assess the eruptive potential of selected active regions

[Francesca Zuccarello](#)¹, [Ilaria Ermolli](#), [Marianna B. Korsos](#), [Fabrizio Giorgi](#), [Salvo L. Guglielmino](#), [Robertus Erdelyi](#), [Paolo Romano](#)

Research in Astronomy and Astrophysics 2021
<https://arxiv.org/pdf/2110.01272.pdf>

11 July – the first flight of the Hi-C sounding rocket

>09 UT : эрупция крупного NE/центрального волокна с трансэкваториальным продолжением, крупный CME, могущий прийти к Земле.

Investigating The Cross-section of Coronal Mass Ejections Through the Study of Non-Radial Flows with STEREO/PLASTIC

N. **Al-Haddad**, [A. B. Galvin](#), [N. Lugaz](#), [C. J. Farrugia](#), [W. Yu](#)

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Hydrodynamics of small transient brightenings in Solar corona

[Abhishek Rajhans](#), [Durgesh Tripathi](#), [Vinay L. Kashyap](#)

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<https://arxiv.org/pdf/2105.08800.pdf>

Gyroresonance and free-free radio emissions from multi-thermal multi-component plasma

[Gregory D. Fleishman](#), [Alexey A. Kuznetsov](#), [Enrico Landi](#)

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[Maria D. Kazachenko](#), [Hugh Hudson](#)

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Cross Sections of Coronal Loop Flux Tubes

James A. **Klimchuk**, [Craig E. DeForest](#)

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Steven R. **Cranmer** (CU Boulder), [Amy R. Winebarger](#) (NASA/MSFC)

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<https://arxiv.org/pdf/1811.00461.pdf>

Energetics of Hi-C EUV brightenings

Srividya **Subramanian**¹, Vinay L. Kashyap², Durgesh Tripathi³, Maria S. Madjarska⁴ and John G. Doyle¹

A&A 615, A47 (2018)

Miniature loops in the solar corona

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Transition-Region/Coronal Signatures and Magnetic Setting of Sunspot Penumbra Jets: {it Hinode} (SOT/FG), Hi-C and {it SDO}/AIA Observations

Sanjiv K. **Tiwari**, Ronald L. Moore, Amy R. Winebarger, Shane E. Alpert
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Solar science with the Atacama Large Millimeter/submillimeter Array - A revolutionizing new view of our Sun **Review**

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<http://arxiv.org/pdf/1504.06887v2.pdf>

Flows and Waves in Braided Solar Coronal Magnetic Structures

V **Pant**, A Datta, Dipankar Banerjee
ApJ Letters **2015**
<http://arxiv.org/pdf/1501.06507v1.pdf>

Trigger Mechanism of Solar Subflares in a Braided Coronal Magnetic Structure

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Forward Modeling Transient Brightenings and Microflares around an Active Region Observed with Hi-C

Adam R. **Kobelski**, David E. McKenzie
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The High-Resolution Coronal Imager (Hi-C)

Ken **Kobayashi**, Jonathan Cirtain, Amy R. Winebarger, Kelly Korreck, Leon Golub, Robert W. Walsh, Bart De Pontieu, Craig DeForest, Alan Title, Sergey Kuzin, ... show all 24
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High-resolution observations of active region moss and its dynamics

R. J. **Morton**, J. A. McLaughlin
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S. **Regnier**, C. E. Alexander, R. W. Walsh, A. R. Winebarger, J. Cirtain, L. Golub, K. E. Korreck, N. Mitchell, S. Platt, M. Weber, B. De Pontieu, A. Title, K. Kobayashi, S. Kuzin, C. E. DeForest
E-print, Feb **2014**; **2014** ApJ 784 134

Hi-C observations of EUV anti-parallel filament flows and sparking dots

Caroline E. [Alexander](#), Stephane Regnier and Robert Walsh

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<http://www.uksolphys.org/?p=6961>

DETECTING NANOFLARE HEATING EVENTS IN SUBARCSECOND INTER-MOSS LOOPS USING Hi-C

Amy R. [Winebarger](#)¹, Robert W. Walsh², Ronald Moore¹, Bart De Pontieu³, Viggo Hansteen⁴, Jonathan Cirtain¹, Leon Golub⁵, Ken Kobayashi⁶, Kelly Korreck⁵, Craig DeForest⁷, Mark Weber⁵, Alan Title³, and Sergey Kuzin
2013 ApJ 771 21

12 July, 16:50 - X1.4 LDE flare (S15, ~W00), coronal wave, halo CME, soft-spectrum radio and protons

See

http://solar.gmu.edu/wiki/presentations/ISEST_2015_workshop/WG1_data/Nitta_stealthy_sun_earth_events.pdf

The effect of AMR and grid stretching on the magnetized CME model in Icarus Baratashvili Tinatin, [Poedts Stefaan](#)

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On the use of relative field line helicity as an indicator for solar eruptivity

[K. Moraitis](#), [S. Patsourakos](#), [A. Nindos](#), [J.K. Thalmann](#), [É. Pariat](#)

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Automatic detection of solar flares observed at 45 GHz by the POEMAS telescope

[Vanessa Lessa](#), [Adriana Valio](#)

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Improving the Arrival Time Estimates of Coronal Mass Ejections by Using Magnetohydrodynamic Ensemble Modeling, Heliospheric Imager data, and Machine Learning

Talwinder [Singh](#), [Bernard Benson](#), [Syed A. Z. Raza](#), [Tae K. Kim](#), [Nikolai V. Pogorelov](#), [William P. Smith](#), [Charles N. Arge](#)

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Kiera van der [Sande](#), Natasha Flyer, Thomas Berger, and Riana Gagnon

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Changes of Magnetic Energy and Helicity in Solar Active Regions from Major Flares
[Yang Liu](#), [Brian T. Welsch](#), [Gherardo Valori](#), [Manolis K. Georgoulis](#), [Yang Guo](#), [Etienne Pariat](#), [Sung-Hong Park](#), [Julia K. Thalmann](#)
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<https://arxiv.org/pdf/2211.09990.pdf>

Improving CME evolution and arrival predictions with AMR and grid stretching in Icarus
T. [Baratashvili](#)¹, C. Verbeke^{1,2}, N. Wijsen¹ and S. Poedts^{1,3}
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<https://www.aanda.org/articles/aa/pdf/2022/11/aa44111-22.pdf>

Data-constrained MHD simulation for the eruption of a filament-sigmoid system in solar active region 11520
[Tie Liu](#), [Yuhong Fan](#), [Yingna Su](#), [Yang Guo](#), [Ya Wang](#), [Haisheng Ji](#)
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Implementation and validation of the FRi3D flux rope model in EUHFORIA
[Anwasha Maharana](#), [Alexey Isavnin](#), [Camilla Scolini](#), [Nicolas Wijsen](#), [Luciano Rodriguez](#), [Marilena Mierla](#), [Jasmina Magdalenic](#), [Stefaan Poedts](#)
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Polarimetric Studies of a Fast Coronal Mass Ejection
[Marilena Mierla](#), [Bernd Inhester](#), [Andrei N. Zhukov](#), [Sergei V. Shestov](#), [Alessandro Bemporad](#), [Philippe Lamy](#), [Serge Koutchmy](#)
Solar Phys. 2022
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Ensemble simulations of the 12 July 2012 Coronal Mass Ejection with the Constant Turn Flux Rope Model
[Talwinder Singh](#), [Tae K. Kim](#), [Nikolai V. Pogorelov](#), [Charles N. Arge](#)
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Reconstruction of the magnetic connection from Mercury to the solar corona during enhancements in the solar proton fluxes at Mercury
A. [Ippolito](#)^{1,2}, C. Plainaki¹, G. Zimbardo³, T. Alberti⁴, S. Massetti⁴, A. Milillo⁴ and S. Orsini⁴
A&A 660, A50 (2022)
<https://www.aanda.org/articles/aa/pdf/2022/04/aa42328-21.pdf>

A magnetic cloud prediction model for forecasting space weather relevant properties of Earth-directed coronal mass ejections
Sanchita [Pal](#), [Dibyendu Nandy](#), [Emilia K J Kilpua](#)
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Understanding the Origins of Problem Geomagnetic Storms Associated With "Stealth" Coronal Mass Ejections
Nariaki V. [Nitta](#), [Tamitha Mulligan](#), [Emilia K. J. Kilpua](#), [Benjamin J. Lynch](#), [Marilena Mierla](#), [Jennifer O'Kane](#), [Paolo Pagano](#), [Erika Palmerio](#), [Jens Pomoell](#), [Ian G. Richardson](#), [Luciano Rodriguez](#), [Alexis P. Rouillard](#), [Suvadip Sinha](#), [Nandita Srivastava](#), [Dana-Camelia Talpeanu](#), [Stephanie L. Yardley](#), [Andrei N. Zhukov](#)
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C. [Scolini](#)^{1,2}, S. Dasso^{3,4}, L. Rodriguez², A. N. Zhukov^{2,5} and S. Poedts
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Relationship between solar energetic particle intensities and coronal mass ejection kinematics using STEREO/SECCHI field of view

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Coronal Heating Law Constrained by Microwave Gyroresonant Emission

[Gregory D. Fleishman](#), [Sergey A. Anfinogentov](#), [Alexey G. Stupishin](#), [Alexey A. Kuznetsov](#), [Gelu M. Nita](#)
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Agnieszka [Gil](#), [Renata Modzelewska](#), [Szczepan Moskwa](#), [Agnieszka Siluszyk](#), [Marek Siluszyk](#), [Anna Wawrzynczak](#), [Mariusz Pozoga](#) & [Lukasz Tomasik](#)
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Application of a Modified Spheromak Model to Simulations of Coronal Mass Ejection in the Inner Heliosphere

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How Does Magnetic Reconnection Drive the Early Stage Evolution of Coronal Mass Ejections?

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A Study of Pre-Flare Solar Coronal Magnetic Fields: Magnetic Flux Ropes

Aiyang [Duan](#), [Chaowei Jiang](#), [Wen He](#), [Xueshang Feng](#), [Peng Zou](#), [Jun Cui](#)

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Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

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Camilla [Scolini](#), [Luciano Rodriguez](#), [Marilena Mierla](#), [Jens Pomoell](#), [Stefaan Poedts](#)

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A. L. E. [Werner](#), [E. Yordanova](#), [A. P. Dimmock](#), [M. Temmer](#)

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<https://doi.org/10.1029/2018SW001993>

Drifting of the line-tied footpoints of CME flux-ropes

Guillaume [Aulanier](#), [Jaroslav Dudik](#)

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<https://arxiv.org/pdf/1811.04253.pdf>

The Effects of Uncertainty in Initial CME Input Parameters on Deflection, Rotation, Bz, and Arrival Time Predictions

C. [Kay](#), [N. Gopalswamy](#)

JGR v. 123 September 2018 Pages 7220-7240

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Tie [Liu](#), [Yingna Su](#), [Xin Cheng](#), [Adriaan van Ballegooijen](#), [Haisheng Ji](#)

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A Statistical Study of the Magnetic Imprints of X-Class Flares using SDO/HMI Vector Magnetograms

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Teresa [Monsue](#), [Frank Hill](#), [Keivan G. Stassun](#)

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A New Technique to Provide Realistic Input to CME Forecasting Models

Nat [Gopalswamy](#) (a1), [Sachiko Akiyama](#) (a2), [Seiji Yashiro](#) (a2) and [Hong Xie](#)

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Recent Voyager Evidence for Rapid Transport of Flare-Generated Disturbances by Polar Coronal Hole Streams

D S Intriligator¹, W D Miller¹, J Intriligator^{1,2}, W Webber³, W Sun⁴, T Detman¹, M Dryer¹ and C Deehr⁴

[Journal of Physics: Conference Series](#), Volume 900, Number 1 012010 2017
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Characteristics that Produce White-Light Enhancements in Solar Flares Observed by Hinode/SOT

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Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David [Webb](#), Nariaki Nitta

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A new technique to provide realistic input to CME forecasting models

Nat [Gopalswamy](#), [Sachiko Akiyama](#), [Seiji Yashiro](#), [Hong Xie](#)

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Solar Activity from 2006 to 2014 and Short-term Forecasts of Solar Proton Events Using the ESPERTA Model

T. [Alberti](#)¹, M. Laurenza², E. W. Cliver³, M. Storini², G. Consolini², and F. Lepreti

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Predicting the magnetic vectors within coronal mass ejections arriving at Earth: 2. Geomagnetic response

N. P. [Savani](#), A. Vourlidas, I. G. Richardson, A. Szabo, B. J. Thompson, A. Pulkkinen, M. L. Mays, T. Nieves-Chinchilla, V. Bothmer

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Predicting the Magnetic Field of Earth-impacting CMEs

C. [Kay](#)¹, N. Gopalswamy¹, A. Reinard², and M. Opher³

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Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

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Predicting the magnetic vectors within coronal mass ejections arriving at Earth: 2. Geomagnetic response: BZ VALIDATION

N. P. [Savani](#),^{1,2} A. Vourlidas,³ I. G. Richardson,^{4,2} A. Szabo,² B. J. Thompson,² A. Pulkkinen,² M. L. Mays,^{5,2} T. Nieves-Chinchilla,^{5,2} V. Bothmer⁶

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Did the July 2012 solar events cause a “tsunami” throughout the heliosphere, heliosheath, and into the interstellar medium?†

Devrie [Intriligator](#)1,*, Wei Sun1,2, Murray Dryer1, James Intriligator1,3, Charles Deehr2, Thomas Detman1 and William R. Webbe

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Near-Sun Speed of CMEs and the Magnetic Non-potentiality of their Source Active Regions

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1. Initial architecture

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Hongqiang [Song](#), [Yao Chen](#), [Jie Zhang](#), [Xin Cheng](#), [Bing Wang](#), [Qiang Hu](#), [Gang Li](#), [Yuming Wang](#)

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Fang [Shen](#)^{1,*}, Chenglong Shen², Jie Zhang³, Phillip Hess³, Yuming Wang², Xueshang Feng¹, Hongze Cheng² and Yi Yang

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N. **Gopalswamy**, P. Mäkelä, H. Xie, and S. Yashiro

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Magnetic Reconnection: From "Open" Extreme-ultraviolet Loops to Closed Post-flare Ones Observed by SDO

Jun **Zhang**¹, Shuhong Yang¹, Ting Li¹, Yuzong Zhang¹, Leping Li¹, and Chaowei Jiang

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T. **Baratashvili**¹, C. Verbeke^{1,2}, N. Wijsen¹ and S. Poedts^{1,3}

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Luca **Sorriso-Valvo**^{1,2}, Emiliya Yordanova¹, Andrew P. Dimmock¹, and Daniele Telloni³

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Jie **Zhang**, [Manuela Temmer](#), [Nat Gopalswamy](#), [Olga Malandraki](#), [Nariaki V. Nitta](#), [Spiros Patsourakos](#), [Fang Shen](#), [Bojan Vršnak](#), [Yuming Wang](#), [David Webb](#), [Mihir I. Desai](#), [Karin Dissauer](#), [Nina Dresing](#), [Mateja Dumbović](#), [Xueshang Feng](#), [Stephan G. Heinemann](#), [Monica Laurenza](#), [Noé Lugaz](#), [Bin Zhuang](#)

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K. **Marubashi**, K.-S. Cho, H. Ishibashi

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David **Webb**, Nariaki Nitta

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Ensemble simulations of the 12 July 2012 Coronal Mass Ejection with the Constant Turn Flux Rope Model

[Talwinder Singh](#), [Tae K. Kim](#), [Nikolai V. Pogorelov](#), [Charles N. Arge](#)

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Did the July 2012 solar events cause a “tsunami” throughout the heliosphere, heliosheath, and into the interstellar medium?†

Devrie **Intriligator**^{1,*}, Wei Sun^{1,2}, Murray Dryer¹, James Intriligator^{1,3}, Charles Deehr², Thomas Detman¹ and William R. Webbe

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Evidence of the Solar EUV hot channel as a magnetic flux rope from remote-sensing and in-situ observations

Hongqiang **Song**, [Yao Chen](#), [Jie Zhang](#), [Xin Cheng](#), [Bing Wang](#), [Qiang Hu](#), [Gang Li](#), [Yuming Wang](#)

ApJL 2015

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Fang [Shen](#)^{1,*}, Chenglong Shen², Jie Zhang³, Phillip Hess³, Yuming Wang², Xueshang Feng¹, Hongze Cheng² and Yi Yang
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13-27 Jul

Magnetohydrodynamic Simulation of Multiple Coronal Mass Ejections: An Effect of "Pre-events"

Chin-Chun **Wu**¹, Kan Liou², Lynn Hutting¹, and Brian E. Wood¹

2022 ApJ 935 67

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Review

[Qingmin Zhang](#)

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Alexandra L. **Lysenko**¹, Stephen M. White², Dmitry A. Zhdanov³, Nataliia S. Meshalkina³, Aleksander T. Altyntsev³, Galina G. Motorina^{1,4,5}, and Gregory D. Fleishman^{6,7}

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Silvia **Perri**, [Giuseppe Prete](#), [Gaetano Zimbardo](#), [Domenico Trotta](#), [Lynn B. Wilson III](#), [David Lario](#), [Sergio Servidio](#), [Francesco Valentini](#), [Joe Giacalone](#)

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Nicolas **Wijsen**, [Angels Aran](#), [Camilla Scolini](#), [David Lario](#), [Alexandr Afanasiev](#), [Rami Vainio](#), [Blai Sanahuja](#), [Jens Pomoell](#), [Stefaan Poedts](#)

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[Markus J. Aschwanden](#)

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D.M. **Oliveira**, [A.A. Samsonov](#)

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Study of the Geoeffectiveness and Galactic Cosmic-Ray Response of VarSITI-ISEST Campaign Events in Solar Cycle 24

O. P. M. **Aslam**, Badruddin

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X. **Cheng**, Y. Guo, M. D. Ding

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D. **Lingri**, H. Mavromichalaki, A. Belov, E. Eroshenko, V. Yanke, A. Abunin, M. Abunina

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Solar Activity Parameters and Associated Forbush Decreases During the Minimum Between Cycles 23 and 24 and the Ascending Phase of Cycle 24

D. **Lingri**, H. Mavromichalaki, A. Belov, E. Eroshenko, V. Yanke, A. Abunin, M. Abunina

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Observational Characteristics of **CMEs without Low Coronal Signatures**

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Stereoscopic Study of the Kinematic Evolution of a Coronal Mass Ejection and Its Driven Shock from the Sun to the Earth and the Prediction of Their Arrival Times

Phillip **Hess** and Jie Zhang

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THE RELATIONSHIP BETWEEN EXTREME ULTRAVIOLET NON-THERMAL LINE BROADENING AND HIGH-ENERGY PARTICLES DURING SOLAR FLARES

T. **Kawate**^{1,2} and S. Imada

2013 ApJ 775 122

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14-15 Jul

Small-scale flux ropes in ICME sheaths

J. **Ruohotie**, [E. K. J. Kilpua](#), [S. W. Good](#), [M. Ala-Lahti](#)

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Solar Energetic Particle Events and Forbush Decreases Driven by the Same Solar Sources

Belov, Anatoly ; [Shlyk, Nataly](#) ; [Abunina, Maria](#) ; [Belova, Elena](#) ; [Abunin, Artem](#) ; [Papaioannou, Athanasios](#)

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An Extended Study of the Precursory Signs of Forbush Decreases: New Findings over the Years 2008 – 2016

D. **Lingri**, H. Mavromichalaki, A. Belov, M. Abunina, E. Eroshenko, A. Abunin

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Did the July 2012 solar events cause a “tsunami” throughout the heliosphere, heliosheath, and into the interstellar medium?†

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JGR 2015

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Space Weather Journal , Jan 2015, File

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15 July – 18:51: C3.8 вспышка, **пересвет** на STEREO-A, $A=10*2/312=0,064$

15 July – геомагнитная буря **Dst~127 nT**

Ensemble simulations of the 12 July 2012 Coronal Mass Ejection with the Constant Turn Flux Rope Model

[Talwinder Singh](#), [Tae K. Kim](#), [Nikolai V. Pogorelov](#), [Charles N. Arge](#)

2022

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Can Smartphones Detect Geomagnetic Storms?

S. F. **Odenwald**

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<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002669>

On the quasi-three dimensional configuration of magnetic clouds

Qiang **Hu**, [Wen He](#), [Jiong Qiu](#), [A. Vourlidas](#), [Chunming Zhu](#)

GRL 2020

<https://arxiv.org/pdf/2010.11889.pdf>

The Solar Event of 14 – 15 July 2012 and Its Geoeffectiveness

Agnieszka **Gil**, [Renata Modzelewska](#), [Szczepan Moskwa](#), [Agnieszka Siluszyk](#), [Marek Siluszyk](#), [Anna Wawrzynczak](#), [Mariusz Pozoga](#) & [Lukasz Tomasiak](#)

Solar Physics volume 295, Article number: 135 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01703-2.pdf>

Energetic Particle and Other Space Weather Events of Solar Cycle 24

N. **Gopalswamy**

E-print, Jan 2013, File; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, 2012

16 July

Fourier Power Spectra of Solar Noise Storms

Marian **Karlický**, Ján Rybák, Christian Monstein

Solar Physics October 2018, 293:143

sci-hub.tw/10.1007/s11207-018-1367-5

17 July – 18:16: M1.7 **пересвет** $A=32*2/312=0,21$ $\leftarrow 16s$ $8s \rightarrow$ **17:56** $25*2/312=0,16$
Очень длинное LDE

17 July, **17:15** – Комплекс SW прилимовых АО 520-521, M1.7 LDE с необычно длинным нарастанием от 12 до 17 UT, протоны, крупный CME, см. STEREO-A

Statistical Study of the Kinetic Features of Supra-arcade Downflows Detected from Multiple Solar Flares

Xiaoyan **Xie**^{1,2,3}, Katharine K. Reeves², Chengcai Shen², and Joshua D. Ingram^{4,2}

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Z. F. **Li**^{1,2}, X. Cheng^{1,2,3}, M. D. Ding^{1,2}, Katharine K. Reeves⁴, DeOndre Kittrell^{4,5}, Mark Weber⁴, and David E. McKenzie⁶

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Onset of a CME-Related Shock Within the Large-Angle Spectrometric Coronagraph (LASCO) Field of View

V.G.**Fainshtein**, [Ya.I.Egorov](#)

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Automatic detection of Interplanetary Coronal Mass Ejections from in-situ data: a deep learning approach

Gautier **Nguyen**, [Nicolas Aunai](#), [Dominique Fontaine](#), [Erwan Le Penec](#), [Joris Van den Bossche](#), [Alexis Jeandet](#), [Brice Bakkali](#), [Louis Vignoli](#), [Bruno Regaldo-Saint Blancar](#)

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Manolis K. **Georgoulis**, [Alexander Nindos](#), and [Hongqi Zhang](#)

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Study of Solar Energetic Particle Associations with Coronal Extreme-ultraviolet Waves

Jinhye **Park**¹, D. E. Innes², R. Bucik^{2,3}, Y.-J. Moon^{1,4}, and S. W. Kahler

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https://www.academia.edu/35052617/STUDY_OF_SOLAR_ENERGETIC_PARTICLE_ASSOCIATIONS_WITH_CORONAL_EXTREME-ULTRAVIOLET_WAVES?email_work_card=view-paper

18-19 July

DIRECT EVIDENCE FOR A FAST CORONAL MASS EJECTION DRIVEN BY THE PRIOR FORMATION AND SUBSEQUENT DESTABILIZATION OF A MAGNETIC FLUX ROPE

S. **Patsourakos**¹, A. Vourlidas², and G. Stenborg

2013 ApJ 764 125

19 July – 06:16: M7.7 **пересвет** $A=53*2/312=0,34$ $\leftarrow 16s$ $8s \rightarrow$ **05:56** $29*2/312=0.186$

Двойная, иллюстрация

19 July, 05:58 – Комплекс SW прилимовых АО 520-521, M7.1 LDE, протоны, крупный CME, см. STEREO-A
See <https://www.youtube.com/watch?v=HFT7ATLQOx8>

О возможном различии в формировании корональных выбросов массы двух типов.

Еселевич В.Г., Еселевич М.В., Зимовец И.В.
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[Lei Lu](#), [Li Feng](#), [Alexander Warmuth](#), [Astrid M. Veronig](#), [Jing Huang](#), [Siming Liu](#), [Weiqun Gan](#), [Zongjun Ning](#), [Beili Ying](#), [Guannan Gao](#)
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Quasi-Periodic Pulsations in Solar and Stellar Flares: A **Review of Underpinning Physical Mechanisms and Their Predicted Observational Signatures**

[I. V. Zimovets](#), [J. A. McLaughlin](#), [A. K. Srivastava](#), [D. Y. Kolotkov](#), [A. A. Kuznetsov](#), [E. G. Kupriyanova](#), [I.-H. Cho](#), [A. R. Inglis](#), [F. Reale](#), [D. J. Pascoe](#), [H. Tian](#), [D. Yuan](#), [D. Li](#) & [Q. M. Zhang](#)
Space Science Reviews volume 217, Article number: 66 (2021)
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Ajay K. [Tiwari](#), [Richard J. Morton](#), [James A. McLaughlin](#)
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Three Dimensional Simulations of Solar Wind Preconditioning and the 23 July 2012 Interplanetary Coronal Mass Ejection

Ravindra T. [Desai](#), [Han Zhang](#), [Emma E. Davies](#), [Julia E. Stawarz](#), [Joan Mico-Gomez](#), [Pilar Iváñez-Ballesteros](#)
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[ГРИЦЫК П.А.1](#), СОМОВ Б.В.1
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P.[Heinzl](#), [L. Kleint](#), [J. Kasparova](#), [S. Krucker](#)
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Which Bow Shock Theory, Gasdynamic or Magnetohydrodynamic, Better Explains CME Stand-off Distance Ratios from LASCO-C2 Observations ?

Jae-Ok [Lee](#)^{1,2}, Y.-J. Moon¹, Jin-Yi Lee³, R.-S. Kim², and K.-S. Cho²
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Jing [Huang](#)^{1,2}, Eduard P. Kontar³, Valery M. Nakariakov⁴, and Guannan Gao
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Samuel **Krucker**, Brian Dennis, Albert Shih, Manfred Bester
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Mitsuo **Oka**¹, Säm Krucker^{1,2}, Hugh S. Hudson^{1,3}, and Pascal Saint-Hilaire
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М.В. **Еселевич**

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N. [Gopalswamy](#)¹, H. Xie^{1,2}, S. Akiyama^{1,2}, S. Yashiro^{1,2}, I. G. Usoskin³, and J. M. Davila
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Diana Morosan, Emilia Kilpua, Erika Palmerio, Benjamin Lynch, Jens Pomoell, Rami Vainio, Minna Palmroth, Juska Räsänen

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Extended radio emission associated with a breakout eruption from the back side of the Sun

D. E. Morosan, E. Palmerio, B. J. Lynch, E. K. J. Kilpua

A&A 2019

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23 July, >02 UT – Крупная эрупция в далеко-залимбовой АО 1520 (см. STEREO-A) VERY FAST FARSIDE CME with rare speed: 3400 km/s/ Очень длительные протоны.

См. фильмы http://cdaw.gsfc.nasa.gov/stereo/daily_movies/2012/07/23/

Spaceweather.com (20 March 2014): <http://www.youtube.com/watch?v=vQvsFjse9yw>

NASA movie (28 Apr 2014) <http://www.youtube.com/watch?v=7ukQhycKOFw>

NASA, 24 July 2014 http://science.nasa.gov/science-news/science-at-nasa/2014/23jul_superstorm/

See <http://www.spaceweather.com/> on 31.10.2014

<http://www.spaceweather.com/archive.php?view=1&day=01&month=11&year=2014>

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Manon Jarry, Alexis P. Rouillard, Ilya Plotnikov, Athanasios Kouloumvakos, Alexander Warmuth

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N. Talebpour Sheshvan, N. Dresing, R. Vainio, A. Afanasiev, D. E. Morosan

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Johannes **Hinrichs**, Jackie A. Davies, Matthew J. West, Volker Bothmer, Bram Bourgoignie, Chris J. Eyles, Philipp Huke, Piers Jiggins, Bogdan Nicula and James Tappin

J. Space Weather Space Clim. **2021**, 11, 11

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Ravindra T. **Desai**, [Han Zhang](#), [Emma E. Davies](#), [Julia E. Stawarz](#), [Joan Mico-Gomez](#), [Pilar Iváñez-Ballesteros](#)

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Small Size Ground Level Enhancements During Solar Cycle 24

Leonty I. **Miroshnichenko**, [Chuan Li](#) & [Victor G. Yanke](#)

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Ying D. **Liu**, [Chong Chen](#), [Xiaowei Zhao](#)

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Ying D. **Liu**, [Xiaowei Zhao](#), [Huidong Hu](#), [Angelos Vourlidas](#), [Bei Zhu](#)

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Recent Voyager Evidence for Rapid Transport of Flare-Generated Disturbances by Polar Coronal Hole Streams

D S [Intriligator](#)¹, W D Miller¹, J [Intriligator](#)^{1,2}, W [Webber](#)³, W Sun⁴, T [Detman](#)¹, M [Dryer](#)¹ and C [Deehr](#)⁴

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Geoeffective Properties of Solar Transients and Stream Interaction Regions

Review

E. K. J. [Kilpua](#), A. [Balogh](#), R. von [Steiger](#), Y. D. [Liu](#)

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Sarah E. [Gibson](#)

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<https://arxiv.org/pdf/1702.02214.pdf>

Structure, Propagation and Expansion of a CME-Driven Shock in the Heliosphere: A Revisit of the 2012 July 23 Extreme Storm

Ying D. [Liu](#), [Huidong Hu](#), [Bei Zhu](#), [Janet G. Luhmann](#), [Angelos Vourlidas](#)

[ApJ](#) 2016

<https://arxiv.org/pdf/1611.04239v1.pdf>

The 2012 July 23 Backside Eruption: An Extreme Energetic Particle Event?

[Nat](#) [Gopalswamy](#), [Seiji Yashiro](#), [Neeharika Thakur](#), [Pertti Mäkelä](#), [Hong Xie](#), [Sachiko Akiyama](#)

[ApJ](#) 2016

<https://arxiv.org/pdf/1610.05790v1.pdf> File

Large gradual solar energetic particle events

Review

Mihir [Desai](#), [Joe Giacalone](#)

[Living Reviews in Solar Physics](#), December 2016, 13:3

<http://solarphysics.livingreviews.org/>

Solar Energetic Particle Event Associated with the 2012 July 23 Extreme Solar Storm

[Bei Zhu](#), [Ying D. Liu](#), [Janet G. Luhmann](#), [Huidong Hu](#), [Rui Wang](#), [Zhongwei Yang](#)

2016

<http://arxiv.org/pdf/1607.01585v1.pdf> File

PROPERTIES OF THE FAST FORWARD SHOCK DRIVEN BY THE 2012 JULY 23 EXTREME CORONAL MASS EJECTION

Pete **Riley**¹, Ronald M. Caplan¹, Joe Giacalone², David Lario³, and Ying Liu
2016 ApJ 819 57

Powerful non-geoeffective interplanetary disturbance of July 2012 observed by muon hodoscope URAGAN

I.I. **Astapov**, , , N.S. Barbashinaa, A.A. Petrukhina, V.V. Shutenko, I.S. Veselovsky
Advances in Space Research Volume 56, Issue 12, 15 December 2015, Pages 2833–2838
<http://www.sciencedirect.com/science/article/pii/S0273117715001854>

Ensemble Modeling of the 23 July 2012 Coronal Mass Ejection

M. D. **Cash**, D. A. Biesecker, V. Pizzo, C. A. de Koning, G. Millward, C. N. Arge, C. J. Henney and D. Odstrcil
Space Weather Volume 13, Issue 10 (pages 611–625) 2015

Properties of the Fast Forward Shock Driven by the July 23 2012 Extreme Coronal Mass Ejection

Pete **Riley**, Ronald M. Caplan, Joe Giacalone, David Lario, Ying Liu
2015
<http://arxiv.org/pdf/1510.06088v1.pdf>

Short-term variability of the Sun-Earth system: an overview of progress made during the CAUSES-II period **Review**

Gopalswamy, Nat; Tsurutani, Bruce; Yan, Yihua
Progress in Earth and Planetary Science, Volume 2, article id. #13, 41 pp., 2015
<http://arxiv.org/pdf/1504.06332v1.pdf>

Properties and Geoeffectiveness of Magnetic Clouds during Solar Cycles 23 and 24†

N. **Gopalswamy**, S. Yashiro^{1,2}, H. Xie^{1,2}, S. Akiyama^{1,2} and P. Mäkelä
JGR 2015
<http://arxiv.org/pdf/1510.00906v1.pdf>

Did the July 2012 solar events cause a “tsunami” throughout the heliosphere, heliosheath, and into the interstellar medium?†

Devrie **Intriligator**^{1,*}, Wei Sun^{1,2}, Murray Dryer¹, James Intriligator^{1,3}, Charles Deehr², Thomas Detman¹ and William R. Webbe
JGR Volume 120, Issue 10 Volume 120, Issue 10 Oct 2015

Study of Solar Energetic Particle Associations with Coronal Extreme-ultraviolet Waves

Jinhye **Park**¹, D. E. Innes², R. Bucik^{2,3}, Y.-J. Moon^{1,4}, and S. W. Kahler
2015 ApJ 808 3

See presentation

https://community.apan.org/cfs-file.ashx/_key/telligent-evolution-components-attachments/13-7784-00-00-14-46-02/Park.pdf

Webb_ISEST (International Study for Earth-Affecting Solar Transients) _MM WG4 Campaign Events_2014, File

See http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_ICME%5CCME_Lists

Testing the estimated hypothetical response of a major CME impact on Earth and its implications to space weather

Ramkumar **Bala**, Patricia Reiff, C. T. Russell
JGR Volume 120, Issue 5 May 2015 Pages 3432–3443

Improvement on Mass Calculations of Solar CMEs

Xinghua **Dai**^{1,2}, Huaning Wang¹, Xin Huang¹, Zhanle Du¹, and Han He
2015 ApJ 801 39

Travel time classification of extreme solar events: Two families and an outlier

Freed, A. J.; Russell, C. T.

Geophysical Research Letters, Volume 41, Issue 19, pp. 6590-6594, 2014; **File**

Interplanetary Propagation Behavior of the Fast Coronal Mass Ejection from 23 July 2012

Manuela **Temmer** and Nariaki Nitta

Solar Phys. 2015

<http://arxiv.org/pdf/1411.6559v1.pdf> **File**

Global simulation of extremely fast coronal mass ejection on 23 July 2012

Kan **Liou**, Chin-Chun Wu, Murray Dryer, Shi-Tsan Wu, Nathan Rich, Simon Plunkett, Lynn Simpson, Craig D. Fry, Kevin Schenk

JASTP, Volume 121, Part A, December 2014, Pages 32–41

<http://www.sciencedirect.com/science/article/pii/S1364682614002247> **File**

Major Solar Eruptions and High Energy Particle Events during Solar Cycle 24

N. **Gopalswamy**, H. Xie, S. Akiyama, P. Makela, S. Yashiro

2014, Earth, Planets, and Space, **File**

<http://arxiv.org/pdf/1408.3617v1.pdf>

The magnitude and effects of extreme solar particle events

Piers **Jiggins**^{*}, Marc-Andre Chavy-Macdonald, Giovanni Santin, Alessandra Menicucci, Hugh Evans and Alain Hilgers

J. Space Weather Space Clim. 4 (2014) A20

<http://www.swsc-journal.org/articles/swsc/pdf/2014/01/swsc130038.pdf>

The Major Solar Eruptive Event in July 2012: Defining Extreme Space Weather Scenarios

Daniel **Baker**

Presentation at Space Weather Workshop in Boulder, April 8-11, 2014; **File**

http://www.swpc.noaa.gov/sww/SWW_Agenda_w_attached_presentations.pdf

Observations of an extreme storm in interplanetary space caused by successive coronal mass ejections

Ying D. **Liu**, Janet G. Luhmann, Primož Kajdič, Emilia K.J. Kilpua, Noé Lugaz, Nariaki V. Nitta, Christian Möstl, Benoit Lavraud, Stuart D. Bale, Charles J. Farrugia & Antoinette B. Galvin

Nature Communications 5, Article number: 3481, 2014, **File**

<http://arxiv.org/pdf/1405.6088v1.pdf>

Simulation of the 23 July 2012 extreme space weather event: What if this extremely rare CME was Earth directed?

Chigomezyo M. **Ngwira**, Antti Pulkkinen, M. Leila Mays, Maria M. Kuznetsova, A. B. Galvin, Kristin Simunac, Daniel N. Baker, Xinlin Li, Yihua Zheng and Alex Glocer

Space Weather, Volume 11, Issue 12, pages 671–679, December 2013

<http://onlinelibrary.wiley.com/doi/10.1002/2013SW000990/pdf>

See presentation at 10th Europ. Space Weather Week

<http://stce.be/esww10/contributions/public/talks/Session1/03-NgwiraChigomezyo/>

A major solar eruptive event in July 2012: Defining extreme space weather scenarios

D. N. **Baker**, X. Li, A. Pulkkinen, C. M. Ngwira, M. L. Mays, A. B. Galvin and K. D. C. Simunac

Space Weather, Volume 11, Issue 10, pages 585–591, October 2013
<http://onlinelibrary.wiley.com/doi/10.1002/swe.20097/pdf>

Hurricane Season in the Inner Heliosphere: Observations of Coronal Mass Ejections during Solar Maximum Review

A. **Vourlidas**

The 11th Hellenic Astronomical Conference, 8-12 September 2013, Athens; **File of Presentation**
<http://www.helas.gr/conf/2013/presentations.php>

Apparent Solar Tornado - Like Prominences Другое событие: SDO 06:15 UT to 08:16 UT
Olga **Panasenco**, Sara F. Martin, Marco Velli
E-print, July 2013, Solar Phys. Volume 289, Issue 2, pp.603-622, 2014
<http://arxiv.org/pdf/1307.2303v1.pdf>

THE VERY UNUSUAL INTERPLANETARY CORONAL MASS EJECTION OF 2012 JULY 23: A BLAST WAVE MEDIATED BY SOLAR ENERGETIC PARTICLES

C. T. **Russell**¹, R. A. Mewaldt², J. G. Luhmann³, G. M. Mason⁴, T. T. von Rosenvinge⁵, C. M. S. Cohen², R. A. Leske², R. Gomez-Herrero⁶, A. Klassen⁷, A. B. Galvin⁸, and K. D. C. Simunac
2013 ApJ 770 38; **File**
http://iopscience.iop.org/0004-637X/770/1/38/pdf/apj_770_1_38.pdf

Soft X-ray Fluxes of Major Flares Far Behind the Limb as Estimated Using STEREO EUV Images

N. V. **Nitta**, M. J. Aschwanden, P. F. Boerner, S. L. Freeland, J. R. Lemen, J.-P. Wuelser
Solar Physics, May 2013, **File**
<http://arxiv.org/pdf/1304.4163v1.pdf>

Energetic Particle and Other Space Weather Events of Solar Cycle 24 **См. TABLE 1**

N. **Gopalswamy**

E-print, Jan 2013, **File**; In Space Weather: The space Radiation Environment, Ed. Q. Hu, G. Li, G. P. Zank, X. Ao, O. Verkhoglyadova, J. H. Adama, AIP Conf Proc. 1500, pp. 14-19, 2012
<http://arxiv.org/pdf/1208.3951v2.pdf>

23-24 July

The Coronal Monsoon: Thermal Nonequilibrium Revealed by Periodic Coronal Rain

Frédéric **Auchère**¹, Clara Froment^{2,3}, Elie Soubrié^{1,4}, Patrick Antolin⁵, Ramon Oliver^{4,6}, and Gabriel Pelouze¹
2018 ApJ 853 176
<http://sci-hub.tw/http://iopscience.iop.org/0004-637X/853/2/176/>

Interplanetary Magnetic Flux Ropes as Agents Connecting Solar Eruptions and Geomagnetic Activities

K. **Marubashi**, K.-S. Cho, H. Ishibashi
Solar Physics December 2017, 292:189
<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1204-2.pdf>

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David **Webb**, Nariaki Nitta
Solar Physics October 2017, 292:142 **File**

24 July

Revisiting the formation mechanism for coronal rain from previous studies

Leping Li, **Hardi Peter**, **Lakshmi Pradeep Chitta**, **Hongqiang Song**
Research in Astronomy and Astrophysics **2021**
<https://arxiv.org/pdf/2107.01339.pdf>

26 July

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. **Howard**¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden

2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86

<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>

<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

27 July – 17:31: M2.7 вспышка, **пересвет** на STEREO-B, $B=22*2/294=0,15$

27 July, 17:26 - квазиимпульсная M2.7 вспышка (S18E62); активность вдоль большого, простирающегося к центру диска, волокна. A small and slow CME was observed after this event.

When do solar erupting hot magnetic flux ropes form?

[A. Nindos](#), [S. Patsourakos](#), [A. Vourlidas](#), [X. Cheng](#), [J. Zhang](#)

A&A 2020

<https://arxiv.org/pdf/2008.04380.pdf>

Decimetric and metric digital solar radio spectrometers of the Yunnan Astronomical Observatories and the first-light results

G. **Gao**, M. Wanga, L. Donga, N. Wu, J. Lin

New Astron. Volume 30, July 2014, Pages 68–78

<http://www.sciencedirect.com/science/article/pii/S1384107614000153>

Covert connection of filaments

Boris **Filippov**

MNRAS, 2015

<http://arxiv.org/pdf/1507.08180v1.pdf>

28 July – 20:56: M6.1 вспышка, **пересвет** на STEREO-B, $B=37*2/294=0,25$

28 July, 20:56 – квазиимпульсная M6.1/2N вспышка (S25E54); активность вдоль большого, простирающегося к центру диска, волокна; partial halo CME.

Automatic detection of solar flares observed at 45 GHz by the POEMAS telescope

[Vanessa Lessa](#), [Adriana Valio](#)

Astronomy and Computing, 2023, Volume 44, 100738

<https://arxiv.org/pdf/2309.06536.pdf>

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

28-29 July

Three case studies of height-time profiles of prominence eruptions observed by AIA and LASCO

Ts **Tsvetkov** [N.Petrov](#)

[Journal of Atmospheric and Solar-Terrestrial Physics](#)

Volume 177, October 2018, Pages 29-37

<http://sci-hub.tw/10.1016/j.jastp.2018.05.013>

29 July – 06:26: M2.3 вспышка, **пересвет** на STEREO-B, $B=16*2/294=0,11$

29 July, 06:22 – более длинная вспышка M2.3/1N (S22E49)

Light Bridges Can Suppress the Formation of Coronal Loops

[Yuhu Miao](#), [Libo Fu](#), [Xian Du](#), [Ding Yuan](#), [Chaowei Jiang](#), [Jiangtao Su](#), [Mingyu Zhao](#), [Sergey Anfinogentov](#)

MNRAS 2021

<https://arxiv.org/pdf/2106.12833.pdf>

Are chains of type I radio bursts generated by similar processes as drifting pulsation structures observed during solar flares?

Marian [Karlicky](#)

A&A 2017

<https://arxiv.org/pdf/1704.08532.pdf>

FINE-SCALE STRUCTURES OF FLUX ROPES TRACKED BY ERUPTING MATERIAL

Ting [Li](#) and Jun Zhang

2013 ApJ 770 L25

30 July – 15:56: M1.1 вспышка, **пересвет** на STEREO-B, $B=10*2/294=0,07$

30 July - 1 Aug

Improvements on coronal hole detection in SDO/AIA images using supervised classification

Martin A. [Reiss](#), Stefan J. Hofmeister, Ruben De Visscher, [Manuela Temmer](#), [Astrid M. Veronig](#), [Véronique Delouille](#), [Benjamin Mampaey](#), [Helmut Ahammer](#)

Journal of Space Weather and Space Climate (SWSC), 2015

<http://arxiv.org/pdf/1506.06623v1.pdf>

https://github.com/rubendv/ch_filament_classification

Modeling Active Region Transient Brightenings Observed with XRT as Multi-Stranded Loops

Adam R [Kobelski](#), David E McKenzie, Martin Donachie

ApJ, 2014

<http://arxiv.org/pdf/1403.7834v1.pdf>

31 July – 12:16: **C5.7 (а не M5.7) пересвет** $B=10*2/294=0,07 \leftarrow 16s \ 8s \rightarrow 10/294=0.034$

Connecting the Wilson depression to the magnetic field of sunspots

B. [Löptien](#), [A. Lagg](#), [M. van Noort](#), [S. K. Solanki](#)

A&A 2020

<https://arxiv.org/pdf/2002.07484.pdf>

2 Aug

Modern Faraday Rotation Studies to Probe the Solar Wind

Jason [Kooi](#), David Wexler, Elizabeth Jensen, Megan Kenny, Teresa Nieves-Chinchilla, Lynn Wilson III, Brian Wood, Lan Jian, Shing Fung, Alexei Pevtsov, Nat Gopalswamy, and Ward Manchester

Front. Astron. Space Sci., 9:841866. 2022 |

<https://doi.org/10.3389/fspas.2022.841866>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.841866/full>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.841866/pdf>

Radio Observations of Coronal Mass Ejections: Space Weather Aspects

Review

[Angelos Vourlidas](#), [Eoin P Carley](#) and [Nicole Vilmer](#)

Front. Astron. Space Sci. 7:43 2020

<https://www.frontiersin.org/articles/10.3389/fspas.2020.00043/full>

<https://sci-hub.st/10.3389/fspas.2020.00043> File

VLA Measurements of Faraday Rotation through Coronal Mass Ejections

Jason E. [Kooi](#), Patrick D. Fischer, Jacob J. Buffo, Steven R. Spangler

Solar Phys. 2016

<https://arxiv.org/pdf/1611.01445v1.pdf>

2-6 Aug

Inferences About the Magnetic Field Structure of a CME with Both In Situ and Faraday Rotation Constraints

Brian E. [Wood](#)¹, Samuel Tun-Beltran¹, Jason E. Kooi², Emil J. Polisensky², and Teresa Nieves-Chinchilla³

2020 ApJ 896 99

<https://sci-hub.tw/https://iopscience.iop.org/article/10.3847/1538-4357/ab93b8>

3 Aug – 06:16: **C2.8** **пересвет** $B=6*2/294=0,041 \leftarrow 16s \ 8s \rightarrow 6/294=0.02$

Сомнительный

3 Aug

The SDO/EVE Solar Irradiance Coronal Dimming Index Catalog. I. Methods and Algorithms

James Paul [Mason](#)^{1,2}, Raphael Attie¹, Charles N. Arge¹, Barbara Thompson¹, and Thomas N. Woods²

2019 ApJS 244 13

<https://iopscience.iop.org/article/10.3847/1538-4365/ab380e/pdf>

Can We Determine the Filament Chirality by the Filament Footpoint Location or the Barb-bearing?

Q. [Hao](#), Y. Guo, C. Fang, [P. F. Chen](#), [W. Cao](#)

RAA 2015

<http://arxiv.org/pdf/1506.08490v1.pdf>

3-4 Aug

Solar Magnetic Flux Ropes

Review

Boris [Filippov](#), Olesya Martsenyuk, Abhishek K. Srivastava, and Wahab Uddin

Journal of Astrophysics & Astronomy, 2015

<http://arxiv.org/ftp/arxiv/papers/1501/1501.02562.pdf>

4 Aug - a **very long duration C3.5 event** beginning just after 11h and peaking at 15:00 UTC. Its source was a **large filament eruption** in the southeast quadrant from about 40 degrees east to the central meridian and from near the equator in the north to ARs 11539 and 11538 in the south. The event was associated with a **full halo asymmetric CME**.

Само волокно осталось, и развилась аркада над ним.

Covert connection of filaments

Boris [Filippov](#)

MNRAS, 2015

<http://arxiv.org/pdf/1507.08180v1.pdf>

Confined Partial Filament Eruption and its Reformation within a Stable Magnetic Flux Rope

Navin Chandra [Joshi](#), Abhishek K. Srivastava, Boris Filippov, Pradeep Kayshap, Wahab Uddin, Ramesh Chandra, Debi Prasad Choudhary, and B. N. Dwivedi
2014 ApJ 787 11

Fast Magnetic Twister and Plasma Perturbations in a 3-D Coronal Arcade

K. [Murawski](#), A.K. Srivastava, Z. E. Musielak
2014

<http://arxiv.org/pdf/1404.4176v1.pdf>

FINE-SCALE STRUCTURES OF FLUX ROPES TRACKED BY ERUPTING MATERIAL

Ting [Li](#) and Jun Zhang
2013 ApJ 770 L25

Fine-scale Structures of Flux Ropes Tracked by Erupting Material

Ting [Li](#) & Jun Zhang
E-print, May 2013, A&A

4-5 Aug

Magnetic Flux Cancellation as the Origin of Solar Quiet Region Pre-Jet Minifilaments

Navdeep K. [Panesar](#), Alphonse C. Sterling, Ronald L. Moore
ApJ 2017

<https://arxiv.org/pdf/1706.09079.pdf>

4-6 Aug

Understanding the plasma and magnetic field evolution of a filament using observations and Nonlinear force-free field modelling

Stephanie L. [Yardley](#), [Antonia Savcheva](#), [Lucie M. Green](#), [Lidia van Driel-Gesztelyi](#), [David Long](#), [David R. Williams](#), [Duncan H. Mackay](#)

ApJ 2019

<https://arxiv.org/pdf/1911.01314.pdf>

5 Aug

Real-time solar wind prediction based on SDO/AIA coronal hole data

T. [Rotter](#) (1), A.M. Veronig (1), M. Temmer (1), B. Vrsnak
Solar Phys. 2015

<http://arxiv.org/pdf/1501.06697v1.pdf>

6 Aug – 04:36: M1.6 вспышка, **пересвет** на STEREO-B, $B=32 \cdot 2/291=0,22$
08:16 C6.3 **пересвет** $B=11,5 \cdot 2/291=0,08 \leftarrow 16s \ 8s \rightarrow B=11,5 \cdot 2/291=0,08$

6 Aug – Три очень импульсные прилиम्бовые рентгеновские вспышки **Gamma**

HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE **Thesis Catalog** (2010-2017)

[Allafort](#), A. J.

(2018). PhD thesis, Stanford Univ. **File**

https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf

6-8 Aug Filament eruption

Synoptic solar observations of the Solar Flare Telescope focusing on space weather

[Yoichiro Hanaoka](#), [Takashi Sakurai](#), [Ken'ichi Otsuji](#), [Isao Suzuki](#), [Satoshi Morita](#)

7-8 Aug

Prominence instability and CMEs triggered by massive coronal rain in the solar atmosphere

Z. [Vashalomidze](#) (1, 2 and 3), [T. V. Zaqarashvili](#) (1, 2 and 3), [V. Kukhianidze](#) (2 and 3), [G. Ramishvili](#) (2 and 3), [A. Hanslmeier](#) (1), [P. Gomory](#) (4)

A&A 2021

<https://arxiv.org/pdf/2110.01287.pdf>

8 Aug

Decameter U-burst Harmonic Pair from a High Loop

[Dorovskyy](#), Melnik, Konovalenko, Bubnov, Gridin, Shevchuk, Rucker, Poedts and Panchenko
CESRA highlight 2016 p.692

<http://www.astro.gla.ac.uk/users/eduard/cesra/?p=692>

Konus-Wind and Helicon-Coronas-F Observations of Solar Flares

V. D. [Pal'shin](#), [Yu. E. Charikov](#), [R. L. Aptekar](#), [S. V. Golenetskii](#), [A. A. Kokomov](#), [D. S. Svinkin](#), [Z. Ya. Sokolova](#), [M. V. Ulanov](#), [D. D. Frederiks](#), [A. E. Tsvetkova](#)

Ge&Ae, 54, 943 (2014)

<http://arxiv.org/pdf/1412.2015v1.pdf>

Decameter U-burst Harmonic Pair from a High Loop

V. V. [Dorovskyy](#), V. N. Melnik, A. A. Konovalenko, I. N. Bubnov, A. A. Gridin, N. V. Shevchuk, H. O. Rucker, S. Poedts, M. Panchenko

Solar Phys., January 2015, Volume 290, [Issue 1](#), pp 181-192

10 Aug

The Properties of Solar Energetic Particle Event-Associated Coronal Mass Ejections Reported in Different CME Catalogs

Ian G. [Richardson](#), Tycho T. von Roseninge, Hilary V. Cane

Solar Phys. Volume 290, [Issue 6](#), pp 1741-1759 2015 File

<http://arxiv.org/pdf/1505.03071v1.pdf>

<https://sci-hub.ru/10.1007/s11207-015-0701-4>

11 Aug – 12:26: M1.0 вспышка, **пересвет** на STEREO-A, $A=9*2/291=0,08$ (**W38, а не 30**)

11 Aug, >12 UT: эрупция над южной частью длинного SW волокна с последующим (~17 UT) продолжением вдоль канала к ЦМ без крупного CME

Global Energetics of Solar Flares: IV. Coronal Mass Ejection Energetics

Markus J. [Aschwanden](#)

ApJ 2016

<http://arxiv.org/pdf/1605.04952v1.pdf> File

http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf

12 Aug

Electric Currents through J-shaped and Non-J-shaped Flare Ribbons

[Yuwei He](#), [Rui Liu](#), [Lijuan Liu](#), [Jun Chen](#), [Wensi Wang](#), [Yuming Wang](#)

ApJ 2020

<https://arxiv.org/pdf/2007.05693.pdf>

Radio Noise Storms and the Connection with the Reorganization of Photospheric Magnetic Fields

Z. A. L. [Sodré](#), [F. C. R. Fernandes](#), [J. C. Santos](#), [C. M. Wrasse](#)

[Solar Physics](#) October 2019, 294:140

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1534-3.pdf>

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia [Alzate](#) and Huw Morgan

2017 ApJ 840 103

<http://sci-hub.cc/10.3847/1538-4357/aa6caa>

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

13 Aug

Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions

Ronald L. [Moore](#)^{1,2}, Navdeep K. Panesar^{3,4}, Alphonse C. Sterling², and Sanjiv K. Tiwari^{3,4}

2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

Mingantu Spectral Radioheliograph for Solar and Space Weather Studies

Yihua [Yan](#), Zhijun Chen, Wei Wang, Fei Liu, Lihong Geng, Linjie Chen, Chengming Tan, Xingyao Chen, Cang Su, and Baolin Tan

Front. Astron. Space Sci., 29 March 2021 |

<https://doi.org/10.3389/fspas.2021.584043>

<https://www.frontiersin.org/articles/10.3389/fspas.2021.584043/full>

14 Aug

Coronal upflows from edges of an active region observed with EUV Imaging Spectrometer onboard Hinode

Naomasa [Kitagawa](#)

PhD thesis, 2014

<http://arxiv.org/pdf/1411.4742v1.pdf>

15 Aug

Cold Solar Flares. I. Microwave Domain

Alexandra L. [Lysenko](#)¹, Stephen M. White², Dmitry A. Zhdanov³, Nataliia S. Meshalkina³, Aleksander T. Altyntsev³, Galina G. Motorina^{1,4,5}, and Gregory D. Fleishman^{6,7}

2023 ApJ 954 122

<https://iopscience.iop.org/article/10.3847/1538-4357/acea20/pdf>

CMEchaser, Detecting Line-of-Sight Occultations Due to Coronal Mass Ejections

Golam [Shaifullah](#), [Caterina Tiburzi](#) & [Pietro Zucca](#)

[Solar Physics](#) volume 295, Article number: 136 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01705-0.pdf>

16 Aug

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

Relationship Between Solar Coronal X-Ray Brightness and Active Region Magnetic Fields: A Study Using High Resolution Observations

Soumitra **Hazra**, Dibyendu Nandy, B Ravindra

2014

<http://arxiv.org/pdf/1406.1683v1.pdf>

17 Aug – 13:21: M2.4 вспышка, **пересвет** на STEREO-B, $B=10*2/290=0,17$
17:26: M1.0 вспышка, **пересвет** на STEREO-B, $B=25*2/290=0,07$

17 Aug

How Common are Hot Magnetic Flux Ropes in the Low Solar Corona? A Statistical Study of EUV Observations

A. **Nindos**, S. Patsourakos, A. Vourlidas, C. Tagikas

ApJ **2015**

<http://arxiv.org/pdf/1507.03766v1.pdf>

18 Aug – 01:01: M5.5 вспышка, **пересвет** на STEREO-B, $B=28*2/289=0,19$
03:26: M1.8 вспышка, **пересвет** на STEREO-B, $B=21*2/289=0,15$
14:26: **C7.3** вспышка, **пересвет** на STEREO-B, $B=8*2/289=0,055$
16:16: M2.0 **пересвет** $B=23*2/289=0,16$ $\leftarrow 16s$ $8s \rightarrow$ 16:05 $B=19*2/289=0,131$
19:16: **C2.5** вспышка, **пересвет** на STEREO-B, $B=7,5*2/289=0,052$
22:56: M1.0 вспышка, **пересвет** на STEREO-B, $B=23*2/289=0,16$
23:26: M1.3 вспышка, **пересвет** на STEREO-B, $B=15*2/289=0,10$

18 Aug

Pre-flare coronal jet and evolutionary phases of a solar eruptive prominence associated with M1.8 flare: SDO and RHESSI observations

Bhuwan **Joshi** (USO/PRL, India), Upendra Kushwaha (USO/PRL, India), Astrid Veronig (University of
Graz, Austria), Kyung-Suk Cho (KASI, South Korea)

ApJ **2016**

<https://arxiv.org/pdf/1611.03629v1.pdf>

Sources of Quasi-Periodic Pulses in the 18 August 2012 Flare

A. **Altyntsev**, N. Meshalkina, H. Meszarosova, M. Karlicky, V. Palshin, S. Lesovoi

Solar Physics, **2016**

<http://arxiv.org/pdf/1601.02332v1.pdf>

19 Aug **залимбовый пересвет** 20:16 $\leftarrow 16s$ $8s \rightarrow$ $A=76/312=0.24$
Рядом меньше

19 Aug

Solar type III bursts with high-frequency cut-off

A.A. **Stanislavsky**

Astronomische Nachrichten, vol. 338, issue 4, pp. 407-412, **2017**

<https://arxiv.org/pdf/1812.07294.pdf>

20 Aug

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. **Howard**¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden

2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86
<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>
<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

21 Aug **залимбовый пересвет** 20:16 \leftarrow 16s 8s \rightarrow B=82/289=0.28
20:11 B=41*2/289=0.28

22 Aug

Statistical Analysis and Catalog of Non-polar Coronal Holes Covering the SDO-Era Using CATCH

Stephan G. [Heinemann](#), [Temmer Manuela](#), [Heinemann Niko](#), [Dissauer Karin](#), [Samara Evangelia](#), [Jerčić Veronika](#), [Stefan J. Hofmeister](#), [Astrid M Veronig](#)

Solar Phys. 294:144 2019

<https://arxiv.org/pdf/1907.01990.pdf> File

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1539-y.pdf>

23 Aug

Difference of source regions between fast and slow coronal mass ejections

B. [Filippov](#)

PASAustralia 2019

<https://arxiv.org/pdf/1904.04060.pdf>

25 Aug

Decameter Type III Bursts with Changing Frequency Drift-Rate Signs

V. N. [Melnik](#), A. I. Brazhenko, A. A. Konovalenko, C. Briand, V. V. Dorovskyy, P. Zarka, A. V. Frantsuzenko, H. O. Rucker, B. P. Rutkevych, M. Panchenko, ... show all 13

Solar Phys., 2015, Volume 290, [Issue 1](#), pp 193-203

See CESRA highlight #913 2016

<http://www.astro.gla.ac.uk/users/eduard/cesra/?p=913>

25-26 Aug

Decameter Type III Bursts with Changing Frequency Drift-Rate Signs

V.N.[Melnik](#), [A.I.Brazhenko](#), [A.A.Konovalenko](#), [C.Briand](#), [V.V.Dorovskyy](#), [P.Zarka](#), [A.V.Frantsuzenko](#), [H.O.Rucker](#), [B.P.Rutkevych](#), [M.Panchenko](#), [L.Denis](#), [T.Zaqarashvili](#), [B.Shergelashvili](#)

Solar phys. 2018

<https://arxiv.org/ftp/arxiv/papers/1802/1802.08336.pdf>

29 Aug - 2 Sept

A Prospective New Diagnostic Technique for Distinguishing Eruptive and Non-Eruptive Active Regions

P. [Pagano](#), [D.H. Mackay](#), [S.L. Yardley](#)

ApJ ? 2019

<https://arxiv.org/pdf/1908.09223.pdf>

30 Aug – 12:16: M1.3 **пересвет** B=34,5*2/287=0,24 \leftarrow 16s 8s \rightarrow 12:11 B=22*2/287=0,153

30 Aug

VLA Measurements of Faraday Rotation through Coronal Mass Ejections

Jason E. [Kooi](#), Patrick D. Fischer, Jacob J. Buffo, Steven R. Spangler

Solar Phys. 2016

<https://arxiv.org/pdf/1611.01445v1.pdf>

31 Aug, >19 UT – впечатляющая эрупция SE волокна (в АО?) с C8 LDE вспышкой; Позднее еще одна эрупция из этого же источника с заметным трансэкваториальным поглощением на 304 А в северном направлении, гало СМЕ, длительные мягкие протоны.

Evolution of Solar Eruptive Events: Investigating the Relationships among Magnetic Reconnection, Flare Energy Release, and Coronal Mass Ejections

Juliana T. **Vievering**¹, Angelos Vourlidas¹, Chunming Zhu², Jiong Qiu², and Lindsay Glesener³
2023 ApJ 946 81

<https://iopscience.iop.org/article/10.3847/1538-4357/acbe3d/pdf>

Filament Leg--Leg Reconnection as a Source of Prominent Supra-Arcade Downflows

Jaroslav **Dudik**, Guillaume Aulanier, Jana Kasparova, Marian Karlicky, Alena Zemanova, Juraj Lorincik, Miloslav Druckmuller

ApJL 2022

<https://arxiv.org/pdf/2209.00306.pdf>

Magnetic Imaging of the Outer Solar Atmosphere (MImOSA): Unlocking the driver of the dynamics in the upper solar atmosphere **Review**

H. Peter, E. Alsina Ballester, V. Andretta, F. Auchere, L. Belluzzi, A. Bemporad, D. Berghmans, E. Buchlin, A. Calcines, L.P. Chitta, K. Dalmasse, T. del Pino Aleman, A. Feller, C. Froment, R. Harrison, M. Janvier, S. Matthews, S. Parenti, D. Przybylski, S.K. Solanki, J. Stepan, L. Teriaca, J. Trujillo Bueno

Experimental Astronomy (on 28. Jul. 2020). 2021

Based on a proposal submitted in response to a call for white papers in the Voyage 2050 long-term plan in the ESA science programme.

<https://arxiv.org/pdf/2101.01566.pdf>

Automated Detection of Accelerating Solar Eruptions using Parabolic Hough Transform

Ritesh Patel, Vaibhav Pant, Priyanka Iyer, Dipankar Banerjee, Marilena Mierla, Matthew J. West

Solar Phys. 2020

<https://arxiv.org/pdf/2010.14786.pdf>

Statistical characteristics on SEPs, radio-loud CMEs, low frequency type II and type III radio bursts associated with impulsive and gradual flares

P. Pappa Kalaiyani, A. Shanmugaraju, O. Prakash, R.-S. Kim

Earth Moon and Planets, [104, 295 ?] (2020)

<https://arxiv.org/pdf/2007.05726.pdf>

<https://sci-hub.tw/https://link.springer.com/article/10.1007/s11038-020-09533-9>

Initiation and Early Kinematic Evolution of Solar Eruptions

X. Cheng, J. Zhang, B. Kliem, T. Török, C. Xing, Z. J. Zhou, B. Inhester, M. D. Ding

ApJ 2020

<https://arxiv.org/pdf/2004.03790.pdf>

Solar Energetic Particles Observed by the STEREO Spacecraft During Solar Cycle 24

I. G. Richardson

Presentation at the Fleishman's Webinar, 22 May 2019

http://www.ioffe.ru/LEA/SF_AR/files/Richardson2019.pdf

February 12, 2000, August 14, 2010, 18 Aug 2010, 4 Aug 2011, Nov. 3, 2011, 31 Aug 2012, January 22 and February 12, 2018, May 3, 2018

Manifestations of three dimensional magnetic reconnection in an eruption of a quiescent filament: \\ Filament strands turning to flare loops

Juraj Lorincik, Jaroslav Dudik, Guillaume Aulanier

ApJ 2019

<https://arxiv.org/pdf/1909.03825.pdf>

Solar Filament Eruptions as Precursors to Flare–CME Events: Establishing the Temporal Connection

Suvadip [Sinha](#)¹, Nandita Srivastava^{1,2}, and Dibyendu Nandy^{1,3}
2019 ApJ 880 84
sci-hub.se/10.3847/1538-4357/ab2239

Velocities of flare kernels and the mapping norm of field line connectivity

Juraj [Lörinčík](#), [Guillaume Aulanier](#), [Jaroslav Dudík](#), [Alena Zemanová](#), [Elena Dzifčáková](#)
ApJ 2019
<https://arxiv.org/pdf/1906.01880.pdf>

Abundances, Ionization States, Temperatures, and FIP in Solar Energetic Particles

Donald V. [Reames](#)
Space Sci. Rev 2017
<https://arxiv.org/ftp/arxiv/papers/1709/1709.00741.pdf>

Origin of Radio Enhancements in Type II Bursts in the Outer Corona

Firas [Al-Hamadani](#), Silja Pohjolainen, Eino Valtonen
[Solar Physics](#) September 2017, 292:127
<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1148-6.pdf>

Testing the current paradigm for space weather prediction with heliospheric imagers

Luke A. [Barnard](#), Curt A. de Koning, Christopher J. Scott, Mathew J. Owens, Julia Wilkinson, Jackie A. Davies
Space Weather Volume 15, Issue 6 June 2017 Pages 782–803
<http://onlinelibrary.wiley.com/doi/10.1002/2017SW001609/full>
<http://sci-hub.cc/10.1002/2017SW001609>

On the Spatial Distribution of Element Abundances and Ionization States in Solar Energetic-Particle Events

Donald V. [Reames](#)
Solar Phys. 2017
<https://arxiv.org/pdf/1705.07471.pdf>

Time Evolution of Elemental Ratios in Solar Energetic Particle events

P. [Zelina](#), S. Dalla, C. M. S. Cohen, R. A. Mewaldt
ApJ 2016
<https://arxiv.org/pdf/1612.00758v1.pdf>

Imaging Prominence Eruptions Out to 1 AU

Brian E. [Wood](#), Russell A. Howard, Mark G. Linton
ApJ 2015
<http://arxiv.org/pdf/1512.06748v1.pdf>

Study of Solar Energetic Particle Associations with Coronal Extreme-ultraviolet Waves

Jinhye [Park](#)¹, D. E. Innes², R. Bucik^{2,3}, Y.-J. Moon^{1,4}, and S. W. Kahler
2015 ApJ 808 3 File
https://www.academia.edu/35052617/STUDY_OF_SOLAR_ENERGETIC_PARTICLE_ASSOCIATIONS_WITH_CORONAL_EXTREME-ULTRAVIOLET_WAVES?email_work_card=view-paper

Estimating the Height of CMEs Associated with a Major SEP Event at the Onset of the Metric Type II Radio Burst during Solar Cycles 23 and 24

P. [Mäkelä](#), N. Gopalswamy, S. Akiyama, H. Xie, and S. Yashiro
ApJ 2015
<http://cdaw.gsfc.nasa.gov/publications/makela/makela2015ApJ.pdf>

Empirical Relationship Between CME Parameters and Geo-effectiveness of Halo CMEs in the Rising Phase of Solar Cycle 24 (2011 – 2013)

A. **Shanmugaraju**, M. Syed Ibrahim, Y.-J. Moon, A. Mujiber Rahman, S. Umapathy
Solar Phys. **2015**; **File**

Statistical survey of widely spread out solar electron events observed with STEREO and ACE with special attention to anisotropies

N. **Dresing**, R. Gomez-Herrero, B. Heber, A. Klassen, O. Malandraki, W. Dröge, and Y. Kartavykh
E-print, July 2014; A&A, Volume 567, A27, July **2014**; **File**

Multi-scale Gaussian normalization for solar image processing

Huw **Morgan**, Miloslav Druckmüller

Solar Phys., 2014

<http://arxiv.org/pdf/1403.6613v1.pdf>

1 September

Forecasting the Remaining Duration of an Ongoing Solar Flare

[Jeffrey W. Reep](#), [Will T. Barnes](#)

Space Weather **2021**

<https://arxiv.org/pdf/2103.03957.pdf>

Ensemble CME Modeling Constrained by Heliospheric Imager Observations

L. **Barnard**, [M. J. Owens](#), [C. J. Scott](#), [C. A. de Koning](#)

AGU Advances [Volume1, Issue3](#) September **2020** e2020AV000214

<https://doi.org/10.1029/2020AV000214>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020AV000214>

A New Space Weather Tool for Identifying Eruptive Active Regions

P. **Pagano**, [D. H. Mackay](#), [S. L. Yardley](#)

ApJ **2019**

<https://arxiv.org/pdf/1910.04226.pdf>

Automated detection of coronal mass ejections in three-dimensions using multi-viewpoint observations

J. **Hutton** and H. Morgan

A&A 599, A68 (**2017**)

<http://www.aanda.org/articles/aa/pdf/2017/03/aa29516-16.pdf>

2 Sept, 01:30 – небольшая центральная эрупция, возможно, волоконная, <05 UT - A full faint halo CME

~09 – **поглощение на 304 Å** из области центральной эрупции.

Degree of electric current neutralization and the activity in solar Active Regions

P. **Vemareddy**

MNRAS **2019**

<https://arxiv.org/pdf/1904.02648.pdf>

Solar sources of interplanetary magnetic clouds leading to helicity prediction

Roger K. **Ulrich**, [Pete Riley](#), [T. Tran](#)

Space Weather **2018**

<https://arxiv.org/ftp/arxiv/papers/1811/1811.03560.pdf>

Observations of Photospheric Vortical Motions During the Early Stage of Filament Eruption

Sajal Kumar **Dhara**, B. Ravindra, Ravinder Kumar Banyal

Solar Phys. **2014**

<http://arxiv.org/pdf/1410.3592v1.pdf>

Time evolution of plasma parameters during the rise of a prominence instability

D. **Orozco Suárez**, J. A. Díaz, A. Asensio Ramos, J. Trujillo Bueno

ApJL, 2014

<http://arxiv.org/pdf/1403.5640v1.pdf>

3 Sept - Геомагнитная буря от эрупции 31-ого, Dst~51 nT, Форбуш

Characteristics of ephemeral coronal holes

Andrew R. **Inglis**, [Rachel E. O'Connor](#), [W. Dean Pesnell](#), [Michael S. Kirk](#), [Nishu Karna](#)

ApJ 2019

<https://arxiv.org/pdf/1906.01757.pdf>

4 Sept

Ensemble CME Modeling Constrained by Heliospheric Imager Observations

L. **Barnard**, [M. J. Owens](#), [C. J. Scott](#), [C. A. de Koning](#)

AGU Advances [Volume1, Issue3](#) September 2020 e2020AV000214

<https://doi.org/10.1029/2020AV000214>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020AV000214>

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

5 Sept - Еще одна геомагнитная буря от эрупции 2-ого, Dst~51 nT, Форбуш

6 Sept – 04:16: M1.6 пересвет $A=33*2/310=0,21 \leftarrow 16s \ 8s \rightarrow A=33/310=0,106$

6 Sept

Яркие ультрафиолетовые узлы как возможные источники когерентного микроволнового излучения.

Мешалкина Н.С., Алтынцев А.Т.

[СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА](#) Том 9 № 4 , 2023, С. 21–29.

<https://naukaru.ru/ru/storage/viewWindow/138047>

Three-Year Global Survey of Coronal Null Points from Potential-Field-Source-Surface (PFSS) Modeling and Solar Dynamics Observatory (SDO) Observations

Michael **Freed**, Dana Longcope, David McKenzie

Solar Physics, 2014

<http://arxiv.org/pdf/1410.4493v1.pdf>

7 Sept

Modeling of Hot Plasma in the Solar Active Region Core

M. **Asgari-Targhi**¹, J. T. Schmelz², S. Imada³, S. Pathak², and G. M. Christian

2015 ApJ 807 146

Observations of Photospheric Vortical Motions During the Early Stage of Filament Eruption

Sajal Kumar **Dhara**, B. Ravindra, Ravinder Kumar Banyal

Solar Phys. 2014
<http://arxiv.org/pdf/1410.3592v1.pdf>

Comparison of Extreme Ultraviolet Imaging Spectrometer Observations of Solar Coronal Loops with Alfvén Wave Turbulence Models

M. **Asgari-Targhi**, A. A. van Ballegooijen, and S. Imada
2014 ApJ 786 28

8 Sept – 18:16: M1.4 **пересвет** $A=20 \cdot 2/310=0,13$ $\leftarrow 16s$ $8s \rightarrow$ **18:11** $A=12,5 \cdot 2/310=0,081$

9 Sept – 22:16: M1.2 **пересвет** $A=29 \cdot 2/310=0,19$ $\leftarrow 16s$ $8s \rightarrow$ **22:51** $A=19 \cdot 2/310=0,123$

Global Energetics of Solar Flares: IV. Coronal Mass Ejection Energetics

Markus J. Aschwanden

ApJ 2016

<http://arxiv.org/pdf/1605.04952v1.pdf> File
http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf

10 Sept

Forecasting SYM-H Index: A Comparison Between Long Short-Term Memory and Convolutional Neural Networks

[F. Siciliano](#) , [G. Consolini](#) , [R. Tozzi](#) , [M. Gentili](#) , [F. Giannattasio](#), [P. De Michelis](#)

Space Weather e2020SW002589 2020

<https://doi.org/10.1029/2020SW002589>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002589>

The depth and the vertical extent of the energy deposition layer in a medium-class solar flare

Krzysztof [Radziszewski](#), [Robert Falewicz](#), [Pawel Rudawy](#)

ApJ 2020

<https://arxiv.org/pdf/2009.06064.pdf>

Investigating the differential emission measure and energetics of microflares with combined SDO/AIA and RHESSI observations

A. R. [Inglis](#), S. Christe

2014, ApJ

<http://arxiv.org/pdf/1405.5262v1.pdf>

11 September

Observational detection of drift velocity between ionized and neutral species in solar prominences

Elena [Khomenko](#), Manuel Collados, Antonio J. Diaz

ApJ 2016

<http://arxiv.org/pdf/1604.01177v1.pdf>

11-12 Sep

Emerging Dimming as Coronal Heating Episodes

Anna V. [Payne](#), [Xudong Sun](#)

ApJ 2021

<https://arxiv.org/pdf/2103.09087.pdf>

12 September

13 Sept, ~06:30 – Эрупция небольшого NW волокна, обширное расширяющееся поглощение на 304 Å, приличный CME

15 Sept

Investigating the differential emission measure and energetics of microflares with combined SDO/AIA and RHESSI observations

A. R. **Inglis**, S. Christe

2014, ApJ

<http://arxiv.org/pdf/1405.5262v1.pdf>

16 Sept

Three-Year Global Survey of Coronal Null Points from Potential-Field-Source-Surface (PFSS) Modeling and Solar Dynamics Observatory (SDO) Observations

Michael **Freed**, Dana Longcope, David McKenzie

Solar Physics, 2014

<http://arxiv.org/pdf/1410.4493v1.pdf>

18 September

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

19 September

Magnetic Flux Cancellation as the Origin of Solar Quiet Region Pre-Jet Minifilaments

Navdeep K. **Panesar**, Alphonse C. Sterling, Ronald L. Moore

ApJ 2017

<https://arxiv.org/pdf/1706.09079.pdf>

20 Sept

Reconstruction of the magnetic connection from Mercury to the solar corona during enhancements in the solar proton fluxes at Mercury

A. **Ippolito**^{1,2}, C. Plainaki¹, G. Zimbardo³, T. Alberti⁴, S. Massetti⁴, A. Milillo⁴ and S. Orsini⁴
A&A 660, A50 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/04/aa42328-21.pdf>

A Simple Way to Estimate the Soft X-ray Class of Far-Side Solar Flares Observed with STEREO/EUVI

I.M. Chertok (1), A.V. Belov (1), V.V. Grechnev (2)

Solar Phys. 2015

Soft X-ray Fluxes of Major Flares Far Behind the Limb as Estimated Using STEREO EUV Images

N. V. **Nitta**, M. J. Aschwanden, P. F. Boerner, S. L. Freeland, J. R. Lemen, J.-P. Wuelser

Solar Physics, May 2013, File

20-21 September

Negative flare in the He I 10830 Å line in facula

Nikolai **Kobanov**, [Andrei Chelpanov](#), [Vasiliy Pulyaev](#)

2017

<https://arxiv.org/pdf/1712.10117.pdf>

Magnetic Flux Cancellation as the Trigger of Solar Quiet-Region Coronal Jets

Navdeep K. [Panesar](#), Alphonse C. Sterling, Ronald L. Moore, Prithi Chakrapani

ApJL 2016

<https://arxiv.org/pdf/1610.08540v1.pdf> File

21 Sept

Using Flare-Induced Modulation of Three- and Five-Minute Oscillations for Studying Wave Propagation in the Solar Atmosphere

[Andrei Chelpanov](#), [Nikolai Kobanov](#)

ApJ 2021

<https://arxiv.org/pdf/2110.12732.pdf>

Onset of the Magnetic Explosion in Solar Coronal Jets in Quiet Regions on the Central Disk

[Navdeep K. Panesar](#), [Ronald L. Moore](#), [Alphonse C. Sterling](#)

ApJ 2020

<https://arxiv.org/pdf/2006.04253.pdf>

Oscillations Accompanying a He I 10830 Å Negative Flare in a Solar Facula II. Response of the Transition Region and Corona

Nikolai [Kobanov](#), [Andrei Chelpanov](#)

2019 *Solar Physics* volume 294, Article number: 58

<https://arxiv.org/pdf/1904.11142.pdf>

<https://link.springer.com/content/pdf/10.1007/s11207-019-1449-z.pdf>

Oscillations accompanying a He I 10830 Å negative flare in a solar facula

Andrei [Chelpanov](#), [Nikolai Kobanov](#)

2018

<https://arxiv.org/pdf/1810.10153.pdf>

22 Sept

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

23 Sept - long duration C1.7 event peaking at 15:56 UTC and was associated with a large filament eruption (and CME) behind the east limb.

Study of Interplanetary and Geomagnetic Response of Filament Associated CMEs

Kunjal [Dave](#), [Wageesh Mishra](#), [Nandita Srivastava](#), [R. M. Jadhav](#)

Proceedings IAU Symposium No. 340, 2018

<https://arxiv.org/pdf/1807.00809.pdf>

Apparent and Intrinsic Evolution of Active Region Upflows

Deborah [Baker](#), Miho Janvier, Pascal Démoulin, Cristina H. Mandrini

Solar Physics April 2017, 292:46

<https://link.springer.com/article/10.1007/s11207-017-1072-9>

25 Sept

Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars

Johan L. Freiherr **von Forstner**, [Jingnan Guo](#), [Robert F. Wimmer-Schweingruber](#), [Donald M. Hassler](#), [Manuela Temmer](#), [Mateja Dumbović](#), [Lan K. Jian](#), [Jan K. Appel](#), [Jaša Čalogović](#), [Bent Ehresmann](#), [Bernd Heber](#), [Henning Lohf](#), [Arik Posner](#), [Christian T. Steigies](#), [Bojan Vršnak](#), [Cary J. Zeitlin](#)

JGR 2017

<https://arxiv.org/pdf/1712.07301.pdf>

Anti-phase oscillations of H α line Doppler velocity and width in solar limb spicules

D. **Khutsishvili**, T. V. Zaqarashvili, E. Khutsishvili, T. Kvernadze, V. Kulidzanishvili, V. Kakhiani, M. Sikharulidze

[Astrophysics and Space Science](#) December 2017, 362:235

<https://link.springer.com/content/pdf/10.1007%2Fs10509-017-3213-x.pdf>

On Sun-to-Earth Propagation of Coronal Mass Ejections: 2. Slow Events and Comparison with Others

Ying D. **Liu**, Huidong Hu, Chi Wang, Janet G. Luhmann, John D. Richardson, Zhongwei Yang, Rui Wang

ApJ Supplement 2016

<http://arxiv.org/pdf/1512.07949v1.pdf>

Kinematics of Interacting CMEs of September 25 and 28, 2012

Wageesh **Mishra**, Nandita Srivastava, Talwinder Singh

JGR 2015

<http://arxiv.org/pdf/1511.06970v1.pdf>

Sun-to-Earth Characteristics of Two Coronal Mass Ejections Interacting near 1 AU: Formation of a Complex Ejecta and Generation of a Two-Step Geomagnetic Storm

Ying D. **Liu**, Zhongwei Yang, Rui Wang, Janet G. Luhmann, John D. Richardson, Noé Lugaz

ApJL, 2014

<http://arxiv.org/pdf/1409.2954v1.pdf>

Relationship Between Solar Coronal X-Ray Brightness and Active Region Magnetic Fields: A Study Using High Resolution Observations

Soumitra **Hazra**, Dibyendu Nandy, B Ravindra

2014

<http://arxiv.org/pdf/1406.1683v1.pdf>

25-28 September

Assessing the collision nature of coronal mass ejections in the inner heliosphere

Wageesh **Mishra**, [Yuming Wang](#), [Nandita Srivastava](#), [Chenglong Shen](#)

ApJ Supplement Series 2017

<https://arxiv.org/pdf/1707.08299.pdf>

27 Sept FARSIDE EXPLOSION: A sunspot on the farside of the sun exploded on Sept. 27th, sparking a bright flare of extreme ultraviolet radiation and hurling [a massive CME](#) into space. Although the explosion occurred on the other side of the sun, it was visible on cell phones around Earth.

Examining the Source Regions of Solar Energetic Particles Using an AI-generated Synchronic Potential Field Source Surface Model

Jinhye **Park**¹, Hyun-Jin Jeong¹, and Yong-Jae Moon^{1,2}

2023 ApJ 953 159

<https://iopscience.iop.org/article/10.3847/1538-4357/acdd00/pdf>

Generation of interplanetary type II radio emission

I. C. **Jebaraj**^{1,2}, A. Kouloumvakos³, J. Magdalenic^{1,2}, A. P. Rouillard³, G. Mann⁴, V. Krupar^{5,6} and S. Poedts^{2,7}

A&A 654, A64 (2021)

<https://www.aanda.org/articles/aa/pdf/2021/10/aa41695-21.pdf>

<https://doi.org/10.1051/0004-6361/202141695>

Pre-eruption Splitting of the Double-Decker Structure in a Solar Filament

[Hanya Pan](#), [Rui Liu](#), [Tingyu Gou](#), [Bernhard Kliem](#), [Yingna Su](#), [Jun Chen](#), [Yuming Wang](#)

ApJ 2021

<https://arxiv.org/pdf/2101.03296.pdf>

Using radio triangulation to understand the origin of two subsequent type II radio bursts

[Immanuel Christopher Jebaraj](#), [Jasmina Magdalenic](#), [Tatiana Podladchikova](#), [Camilla Scolini](#), [Jens Pomoell](#), [Astrid Veronig](#), [Karin Dissauer](#), [Vratislav Krupar](#), [Emilia Kilpua](#), [Stefaan Poedts](#)

A&A 2020

<https://arxiv.org/pdf/2006.04586.pdf>

Spectroscopy and Differential Emission Measure diagnostics of a coronal dimming associated with a fast halo CME

Astrid M. [Veronig](#), [Peter Gömöry](#), [Karin Dissauer](#), [Manuela Temmer](#), [Kamalam Vanninathan](#)

ApJ 2019

<https://arxiv.org/pdf/1906.01517.pdf>

Exploring the potential of microwave diagnostics in SEP forecasting: The occurrence of SEP events

Pietro [Zucca](#), Marlon Núñez and Karl-Ludwig Klein

J. Space Weather Space Clim., 7, A13 (2017)

<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170001.pdf>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth: 2. Geomagnetic response

N. P. [Savani](#), A. Vourlidas, I. G. Richardson, A. Szabo, B. J. Thompson, A. Pulkkinen, M. L. Mays, T. Nieves-Chinchilla, V. Bothmer

Space Weather Volume 15, Issue 2 February 2017 Pages 441–461 DOI: 10.1002/2016SW001458

<http://onlinelibrary.wiley.com/doi/10.1002/2016SW001458/full>

<http://sci-hub.cc/10.1002/2016SW001458>

High-energy solar particle events in cycle 24

Nat [Gopalswamy](#), [Pertti Makela](#), [Seiji Yashiro](#), [Hong Xie](#), [Sachiko Akiyama](#), [Neeharika Thakur](#)

The 14th International Astrophysics Conference held in Tampa, FL during April 24-29, 2015. Accepted for publication in Journal of Physics: Conference Series (JPCS). edited by G. Zank, 2015

<http://arxiv.org/ftp/arxiv/papers/1507/1507.06162.pdf>; **File**

Predicting the magnetic vectors within coronal mass ejections arriving at Earth:

2. Geomagnetic response: BZ VALIDATION

N. P. [Savani](#),^{1,2} A. Vourlidas,³ I. G. Richardson,^{4,2} A. Szabo,² B. J. Thompson,² A. Pulkkinen,² M. L. Mays,^{5,2} T. Nieves-Chinchilla,^{5,2} V. Bothmer⁶

Space Weather 2016

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

1. Initial architecture

[Savani](#), N. P.; Vourlidas, A.; Szabo, A.; Mays, M. L.; Thompson, B. J.; Richardson, I. G.; Evans, R.; Pulkkinen, A.; Nieves-Chinchilla, T.

Space Weather, Volume 13, Issue 6 June 2015 Pages 374–385,

<http://arxiv.org/pdf/1502.02067v1.pdf> **File**

<http://onlinelibrary.wiley.com/doi/10.1002/2015SW001171/full>

Estimating the Height of CMEs Associated with a Major SEP Event at the Onset of the Metric Type II Radio Burst during Solar Cycles 23 and 24

P. **Mäkelä**, N. Gopalswamy, S. Akiyama, H. Xie, and S. Yashiro

ApJ 2015

<http://cdaw.gsfc.nasa.gov/publications/makela/makela2015ApJ.pdf>

The Relation Between Large-Scale Coronal Propagating Fronts and Type II Radio Bursts

Nariaki V. **Nitta**, Wei Liu, Nat Gopalswamy, Seiji Yashiro

Solar Phys., 2014

http://www.lmsal.com/nitta/publ/SP_typeII_20140904.pdf

<http://arxiv.org/pdf/1409.4754v1.pdf> File

Sun-to-Earth Characteristics of Two Coronal Mass Ejections Interacting near 1 AU: Formation of a Complex Ejecta and Generation of a Two-Step Geomagnetic Storm

Ying D. **Liu**, Zhongwei Yang, Rui Wang, Janet G. Luhmann, John D. Richardson, Noé Lugaz

ApJL, 2014

<http://arxiv.org/pdf/1409.2954v1.pdf>

Investigating the differential emission measure and energetics of microflares with combined SDO/AIA and RHESSI observations

A. R. **Inglis**, S. Christe

2014, ApJ

<http://arxiv.org/pdf/1405.5262v1.pdf>

27-28 Sept, 23:30-02 – заметная NW эрупция, поглощение на 304 А, протоны, CME

Structured type III radio bursts observed in interplanetary space

Immanuel C. **Jebaraj**, [Jasmina Magdalenic](#), [Vladimir Krasnoselskikh](#), [Vratislav Krupar](#), [Stefaan Poedts](#)

A&A 2022

<https://arxiv.org/pdf/2209.12333.pdf>

28 Sept **залимбовый пересвет** 10:16 ←16s 8s→ A=56/311=0.18 <0.2 **не берём**

10:11 тоже 0.18

28 September **INCOMING SOLAR STORM CLOUD**: Magnetic fields around sunspot 1577 erupted on Sept. 28th, hurling a coronal mass ejection (CME) almost directly toward Earth.

Improving the Arrival Time Estimates of Coronal Mass Ejections by Using Magnetohydrodynamic Ensemble Modeling, Heliospheric Imager data, and Machine Learning

Talwinder **Singh**, [Bernard Benson](#), [Syed A. Z. Raza](#), [Tae K. Kim](#), [Nikolai V. Pogorelov](#), [William P. Smith](#), [Charles N. Arge](#)

2023

<https://arxiv.org/pdf/2302.05588.pdf>

Predicting the Time-of-Arrival of Coronal Mass Ejections at Earth From Heliospheric Imaging Observations

Carlos Roberto **Braga**, [Angelos Vourlidas](#), [Guillermo Stenborg](#), [Alisson Dal Lago](#), [Rafael Rodrigues Souza de Mendonça](#), [Ezequiel Echer](#)

JGR 2020

<https://arxiv.org/pdf/2008.09005.pdf>

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha **Sachdeva**

Ph.D. **Thesis** 2019

<https://arxiv.org/pdf/1907.12673.pdf>

The Effects of Uncertainty in Initial CME Input Parameters on Deflection, Rotation, Bz, and Arrival Time Predictions

C. [Kay](#) , [N. Gopalswamy](#)

JGR v. 123 September 2018 Pages 7220-7240

sci-hub.tw/10.1029/2018JA025780

Statistics of coronal dimmings associated with coronal mass ejections.

II. Relationship between coronal dimmings and their associated CMEs

Karin [Dissauer](#), [Astrid M. Veronig](#), [Manuela Temmer](#), [Tatiana Podladchikova](#)

ApJ 2018

<https://arxiv.org/pdf/1810.01589.pdf>

Testing the current paradigm for space weather prediction with heliospheric imagers

Luke A. [Barnard](#), Curt A. de Koning, Christopher J. Scott, Mathew J. Owens, Julia Wilkinson, Jackie A. Davies

Space Weather Volume 15, Issue 6 June 2017 Pages 782–803

<http://onlinelibrary.wiley.com/doi/10.1002/2017SW001609/full>

<http://sci-hub.cc/10.1002/2017SW001609>

Kinematics of Interacting CMEs of September 25 and 28, 2012

Wageesh [Mishra](#), Nandita Srivastava, Talwinder Singh

JGR 2015

<http://arxiv.org/pdf/1511.06970v1.pdf>

Webb_ISEST (International Study for Earth-Affecting Solar Transients) _MM WG4 Campaign Events_2014, File

See http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_ICME%5CCME_Lists

Large Solar Energetic Particle Events Associated with Filament Eruptions Outside of Active Regions

N. [Gopalswamy](#), P. Makela, S. Akiyama, S. Yashiro, H. Xie, N. Thakur, S. W. Kahler

ApJ 2015

<http://arxiv.org/ftp/arxiv/papers/1504/1504.00709.pdf>

30 Sept – 04:36: M1.3 вспышка, **пересвет** на STEREO-A, $A=17*2/310=0,11$
23:41: C9.9 вспышка, **пересвет** на STEREO-A, $A=9*2/310=0,058$

30 Sept **залимбовый пересвет** 16:16 $\leftarrow 16s$ $8s \rightarrow A=42/311=0.14 < 0.2$ **не берём**
Рядом меньше

30 Sept

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

Ensemble CME Modeling Constrained by Heliospheric Imager Observations

L. [Barnard](#) , [M. J. Owens](#) , [C. J. Scott](#) , [C. A. de Koning](#)

AGU Advances [Volume1, Issue3](#) September 2020 e2020AV000214

<https://doi.org/10.1029/2020AV000214>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020AV000214>

Study of Interplanetary and Geomagnetic Response of Filament Associated CMEs

Kunjil [Dave](#), [Wageesh Mishra](#), [Nandita Srivastava](#), [R. M. Jadhav](#)

Proceedings IAU Symposium No. 340, 2018

<https://arxiv.org/pdf/1807.00809.pdf>

On The Relationship Between Magnetic Cancellation and UV Burst Formation

C. J. [Nelson](#), J. G. Doyle, R. Erdelyi

MNRAS **2016**

<http://arxiv.org/pdf/1608.06505v1.pdf>

The radial speed-expansion speed relation for Earth-directed CMEs

P. [Mäkelä](#), N. Gopalswamy, S. Yashiro

Space Weather Volume 14, Issue 5 May **2016** Pages 368–378 **File**

<http://cdaw.gsfc.nasa.gov/publications/makela/makela2016SpaceWeather.pdf>

Coronal Condensation in Funnel Prominences as Return Flows of the Chromosphere-Corona Mass Cycle

[Liu](#), Wei; Berger, Thomas E.; and Low, B. C.

2014/01, Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 441-442

http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf

Hot coronal loops associated with umbral brightenings*

C. E. [Alissandrakis](#) and S. Patsourakos

A&A 556, A79 (**2013**)

30 Sent- 1 Oct – геомагнитная буря с Dst~143 нТл от эрупции 27-28 Sent

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

[Savani](#), N. P.; Vourlidis, A.; Szabo, A.; Mays, M. L.; Thompson, B. J.; Richardson, I. G.; Evans, R.; Pulkkinen, A.; Nieves-Chinchilla, T.

Space Weather Journal , Jan **2015**, **File**

<http://arxiv.org/pdf/1502.02067v1.pdf>

Sun-to-Earth Characteristics of Two Coronal Mass Ejections Interacting near 1 AU: Formation of a Complex Ejecta and Generation of a Two-Step Geomagnetic Storm

Ying D. [Liu](#), Zhongwei Yang, Rui Wang, Janet G. Luhmann, John D. Richardson, Noé Lugaz
ApJL, **2014**

<http://arxiv.org/pdf/1409.2954v1.pdf>

1 Oct Dst~ -65 nT (от эрупции волокна 27-28 сент.)

Analytical solutions of continuity equation for joint collisional and Ohmic energy losses and their effects on hard X-ray emission. II. Mixed energy losses

[Zharkova](#) V.V. and Dobranskis R.R.

MNRAS **2016**

<http://mnras.oxfordjournals.org/content/early/2016/03/07/mnras.stw500.full.pdf?keytype=ref&ijkey=zcVKoDhBj8zNW7o>

1-3 Oct

Radio measurements of coronal magnetic fields in fan-spine configurations on the Sun

B. [Ryabov](#) and A. Vrublevskis

CESRA #3554 **2023** <https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3554>

See <https://doi.org/10.2478/lpts-2023-0011>

2 Oct

Probing the Sunspot Atmosphere with Three-Minute Oscillations

A.S. [Deres](#), [S.A. Anfinogentov](#)

Solar Phys. **2017**

<https://arxiv.org/pdf/1710.11552.pdf>

Relationship Between Solar Coronal X-Ray Brightness and Active Region Magnetic Fields: A Study Using High Resolution Observations

Soumitra **Hazra**, Dibyendu Nandy, B Ravindra

2014

<http://arxiv.org/pdf/1406.1683v1.pdf>

4 Oct

Is There a Dynamic Difference between Stealthy and Standard Coronal Mass Ejections?

Beili **Ying**¹, Alessandro Bemporad^{2,1}, Li Feng^{1,3}, Nariaki V. Nitta⁴, and Weiqun Gan^{1,3}

2023 ApJ 942 3

<https://iopscience.iop.org/article/10.3847/1538-4357/aca52c/pdf>

Advances in Observing Various Coronal EUV Waves in the SDO Era and Their Seismological Applications (**Invited Review**)

Wei **Liu**, Leon Ofman

E-print, April 2014; Solar Physics (Topical Issue, "Exploring the Network of SDO Science")

http://sun.stanford.edu/~weiliu/research/publications/2014/2014SolPhy_Liu_Ofman_SDO-EUV-wave-review.pdf

4-5 Oct

Earth-affecting Solar Transients: A **Review** of Progresses in Solar Cycle 24

Jie **Zhang**, [Manuela Temmer](#), [Nat Gopalswamy](#), [Olga Malandraki](#), [Nariaki V. Nitta](#), [Spiros Patsourakos](#), [Fang Shen](#), [Bojan Vršnak](#), [Yuming Wang](#), [David Webb](#), [Mihir I. Desai](#), [Karin Dissauer](#), [Nina Dresing](#), [Mateja Dumbović](#), [Xueshang Feng](#), [Stephan G. Heinemann](#), [Monica Laurenza](#), [Noé Lugaz](#), [Bin Zhuang](#)

<https://arxiv.org/ftp/arxiv/papers/2012/2012.06116.pdf> File 2021

2020 <https://arxiv.org/abs/2012.06116>

4-8 Oct

Interplanetary Magnetic Flux Ropes as Agents Connecting Solar Eruptions and Geomagnetic Activities

K. **Marubashi**, K.-S. Cho, H. Ishibashi

[Solar Physics](#) December 2017, 292:189

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1204-2.pdf>

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David **Webb**, Nariaki Nitta

[Solar Physics](#) October 2017, 292:142 File

Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures

Nariaki V. **Nitta**, Tamitha Mulligan

[Solar Physics](#) September 2017, 292:125 File

Webb_ISEST (International Study for Earth-Affecting Solar Transients) _MM WG4 Campaign Events_2014, File

See http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

http://solar.gmu.edu/heliophysics/index.php/The_ISEST_ICME%5CCME_Lists

5 Oct, 03-10 UT: A very long duration B7.8 event peaked at 07:30 UTC and was associated with a filament eruption near SW AR 11584. A partial halo CME was observed in LASCO images and STEREO imagery indicate that parts of the CME are Earth directed.

See

http://solar.gmu.edu/wiki/presentations/ISEST_2015_workshop/working_group_summary/WG1_summary_2015_Zhang.pdf

See

http://solar.gmu.edu/wiki/presentations/ISEST_2015_workshop/WG1_data/Nitta_stealthy_sun_earth_events.pdf

Rotation of a Stealth CME on 2012 October 5 Observed in the Inner Heliosphere

Sandeep **Kumar**, [Dinesha V. Hegde](#), [Nandita Srivastava](#), [Nikolai V. Pogorelov](#), [Nat Gopalswamy](#), [Seiji Yashiro](#)

ApJ 2023

<https://arxiv.org/pdf/2310.04023.pdf>

Categorization of Coronal Mass Ejection Driven Sheath Regions: Characteristics of STEREO Events

T. M. **Salman**, [N. Lugaz](#), [R. M. Winslow](#), [C. J. Farrugia](#), [L. K. Jian](#), [A. B. Galvin](#)

ApJ 2021

<https://arxiv.org/pdf/2106.12076.pdf>

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha **Sachdeva**

Ph.D. **Thesis** 2019

<https://arxiv.org/pdf/1907.12673.pdf>

Testing the current paradigm for space weather prediction with heliospheric imagers

Luke A. **Barnard**, Curt A. de Koning, Christopher J. Scott, Mathew J. Owens, Julia Wilkinson, Jackie A. Davies

Space Weather Volume 15, Issue 6 June 2017 Pages 782–803

<http://onlinelibrary.wiley.com/doi/10.1002/2017SW001609/full>

<http://sci-hub.cc/10.1002/2017SW001609>

Predicting the Arrival Time of Coronal Mass Ejections with the Graduated Cylindrical Shell and Drag Force Model

Tong **Shi**, Yikang Wang, Linfeng Wan, Xin Cheng, Mingde Ding, Jie Zhang

ApJ 2015

<http://arxiv.org/pdf/1505.00884v1.pdf>

6 Oct

Predicting the Time-of-Arrival of Coronal Mass Ejections at Earth From Heliospheric Imaging Observations

Carlos Roberto **Braga**, [Angelos Vourlidas](#), [Guillermo Stenborg](#), [Alisson Dal Lago](#), [Rafael Rodrigues Souza de Mendonça](#), [Ezequiel Echer](#)

JGR 2020

<https://arxiv.org/pdf/2008.09005.pdf>

7 Oct

Magnetic Flux of Active Regions Determining the Eruptive Character of Large Solar Flares

Ting **Li**, [Yijun Hou](#), [Shuhong Yang](#), [Jun Zhang](#), [Lijuan Liu](#), [Astrid M. Veronig](#)

ApJ 2020

<https://arxiv.org/pdf/2007.08127.pdf>

Evershed flow observed in neutral and singly ionized iron lines

E. **Khomenko**, M. Collados, N. Shchukina, A. Diaz

A&A 2015
<http://arxiv.org/pdf/1510.00334v1.pdf>

8 Oct – 11:16: M2.3 вспышка, **пересвет** на STEREO-B, $B=18*2/280=0,13$

8 Oct., 11:17 - a solar M2.3 flare erupted on the northeastern limb of the sun's disk.
http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List

A new trigger mechanism for coronal mass ejections: the role of confined flares and photospheric motions in the formation of hot flux ropes

[Alexander W James](#), [Lucie M Green](#), [Lidia van Driel-Gesztelyi](#), [Gherardo Valori](#)

A&A 2020
<https://arxiv.org/pdf/2010.11204.pdf>

Ensemble CME Modeling Constrained by Heliospheric Imager Observations

L. [Barnard](#), [M. J. Owens](#), [C. J. Scott](#), [C. A. de Koning](#)

AGU Advances [Volume1, Issue3](#) September 2020 e2020AV000214

<https://doi.org/10.1029/2020AV000214>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020AV000214>

The Efficiency of Coronal Mass Ejection With Different IMF Preconditions on the Production of Megaelectronvolt Electron Content in the Outer Radiation Belt

C.-J. [Yuan Q.-G. Zong](#)

JGR [Volume124, Issue5](#) May 2019 Pages 3222-3235

sci-hub.se/10.1029/2018JA026263

Study of the Geoeffectiveness and Galactic Cosmic-Ray Response of VarSITI-ISEST Campaign Events in Solar Cycle 24

O. P. M. [Aslam](#), Badruddin

[Solar Physics](#) September 2017, 292:135

8-9 Oct – геомагнитная буря от эрупции 5-ого сначала с **Dst ~-95 нТл**, а потом **-111 нТл**

Earth-affecting Solar Transients: A Review of Progresses in Solar Cycle 24

Jie [Zhang](#), [Manuela Temmer](#), [Nat Gopalswamy](#), [Olga Malandraki](#), [Nariaki V. Nitta](#), [Spiros Patsourakos](#), [Fang Shen](#), [Bojan Vršnak](#), [Yuming Wang](#), [David Webb](#), [Mihir I. Desai](#), [Karin Dissauer](#), [Nina Dresing](#), [Mateja Dumbović](#), [Xueshang Feng](#), [Stephan G. Heinemann](#), [Monica Laurenza](#), [Noé Lugaz](#), [Bin Zhuang](#)

<https://arxiv.org/ftp/arxiv/papers/2012/2012.06116.pdf> File 2021

2020 <https://arxiv.org/abs/2012.06116>

9 Oct – 23:36: M1.7 вспышка, **пересвет** на STEREO-B, $B=19*2/280=0,14$

10 Oct – 05:01: M1.0 вспышка, **пересвет** на STEREO-B, $B=15*2/280=0,107$ **Вставить**
S29E85 L~254 AR11590

10 Oct

Multiwavelength study of twenty jets emanating from the periphery of active regions
Sargam M. Mulay, Durgesh Tripathi, Giulio Del Zanna, Helen Mason

A&A 2016

Nonlinear MHD waves in a Prominence Foot

Leon Ofman, Kalman Knizhnik, Therese Kucera, Brigitte Schmieder

2015

<http://arxiv.org/pdf/1509.07911v1.pdf>

Propagating Waves Transverse to the Magnetic Field in a Solar Prominence

B. Schmieder, T.A. Kucera, K. Knizhnik, M. Luna, A. Lopez-Ariste, and D. Toot

E-print, Sept 2013; ApJ

12 Oct

The Statistical Relationship between White-light Emission and Photospheric Magnetic Field Changes in Flares

J. S. Castellanos Durán, L. Kleint

ApJ 2020

<https://arxiv.org/pdf/2007.02954.pdf>

Magnetic field in atypical prominence structures: Bubble, tornado and eruption

P. J. Levens, B. Schmieder, A. López Ariste, N. Labrosse, K. Dalmasse, B. Gelly

2016

<http://arxiv.org/pdf/1605.05964v1.pdf>

13 Oct - геомагнитная буря с Dst ~-94 нТл от КД или от эрупций волокон

14 Oct – 22:16: C3.0 **пересвет** $B=11 \cdot 2/280=0,079 \leftarrow 16s \quad 8s \rightarrow B=11/280=0,039$

14 Oct

Multi-wavelength Observation of a Failed Eruption from a Helical Kink-unstable Prominence

Haiqing Xu, Jiangtao Su, Jie Chen, Guiping Ruan, Arun Kumar Awasthi, Hongqi Zhang, Mei Zhang, Kaifan Ji, Yuzong Zhang, Jiajia Liu

ApJ 2020

<https://arxiv.org/pdf/2008.08299.pdf>

Multi-viewpoint Coronal Mass Ejection Catalog Based on STEREO COR2 Observations

Angelos Vourlidis^{1,4}, Laura A. Balmaceda^{2,5,6}, Guillermo Stenborg³, and Alisson Dal Lago²

2017 ApJ 838 141 File

<http://sci-hub.cc/10.3847/1538-4357/aa67f0>

15 Oct

Magnetic field in atypical prominence structures: Bubble, tornado and eruption

P. J. Levens, B. Schmieder, A. López Ariste, N. Labrosse, K. Dalmasse, B. Gelly

2016

<http://arxiv.org/pdf/1605.05964v1.pdf>

16 Oct

Can we explain non-typical solar flares?

K. Dalmasse, R. Chandra, B. Schmieder, G. Aulanier

A&A, 2014

<http://arxiv.org/pdf/1410.8194v1.pdf>

A confined flare above filaments

K. Dalmasse, R. Chandra, B. Schmieder and G. Aulanier

E-print, Oct 2013; Proceedings of the IAU S300
<http://arxiv.org/abs/1310.0667>

17 Oct

Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars

Johan L. Freiherr [von Forstner](#), [Jingnan Guo](#), [Robert F. Wimmer-Schweingruber](#), [Donald M. Hassler](#), [Manuela Temmer](#), [Mateja Dumbović](#), [Lan K. Jian](#), [Jan K. Appel](#), [Jaša Čalogović](#), [Bent Ehresmann](#), [Bernd Heber](#), [Henning Lohf](#), [Arik Posner](#), [Christian T. Steigies](#), [Bojan Vršnak](#), [Cary J. Zeitlin](#)

JGR

2017

<https://arxiv.org/pdf/1712.07301.pdf>

Anti-phase oscillations of H α line Doppler velocity and width in solar limb spicules

D. [Khutsishvili](#), T. V. [Zaqarashvili](#), E. [Khutsishvili](#), T. [Kvernadze](#), V. [Kulidzanishvili](#), V. [Kakhiani](#), M. [Sikharulidze](#)

[Astrophysics and Space Science](#) December 2017, 362:235

<https://link.springer.com/content/pdf/10.1007%2Fs10509-017-3213-x.pdf>

Quasi-periodic variations in Doppler velocities of H α spicules

E. [Khutshishvili](#), [V. Kulidzanishvili](#), [T. Kvernadze](#), [T. V. Zaqarashvili](#), [V. Kakhiani](#), [D. Khutsishvili](#), [M. Sikharulidze](#)

[Astrophysics and Space Science](#) October 2014, 354:2100

19 Oct **залимбовый пересвет**

12:16 \leftarrow 16s 8s \rightarrow A=40/312=0.13

12:21 A=23*2/312=0.15 <0.2 не берём

20 Oct – 18:16: M9.0 **пересвет** B=68*2/279= 0,49 \leftarrow 16s 8s \rightarrow B=68/279=0,243

20 Oct – 18:16: M9.0 вспышка, **пересвет** на STEREO-B, B=19/78=0,244

Forecasting the Remaining Duration of an Ongoing Solar Flare

[Jeffrey W. Reep](#), [Will T. Barnes](#)

[Space Weather](#) 2021

<https://arxiv.org/pdf/2103.03957.pdf>

What determine Solar Flares Producing Interplanetary Type III Radio Bursts?

[Y. K. Kou](#), [Z. C. Jing](#), [X. Cheng](#), [W. Q. Pan](#), [Y. Liu](#), [C. Li](#), [M. D. Ding](#)

[ApJL](#) 2020

<https://arxiv.org/pdf/2007.03852.pdf>

Eruption of Solar Magnetic Flux Ropes Caused by Flux Feeding

[Quanhao Zhang](#), [Yuming Wang](#), [Rui Liu](#), [Jie Zhang](#), [Youqiu Hu](#), [Wensi Wang](#), [Bin Zhuang](#), [Xiaolei Li](#)

[ApJL](#) 2020

<https://arxiv.org/pdf/2007.01278.pdf>

The Effect Of Cooling On Driven Kink Oscillations Of Coronal Loops

C. J. [Nelson](#), [A. A. Shukhobodskiy](#), [R. Erdélyi](#), [M. Mathioudakis](#)

[Frontiers in Astronomy and Space Science](#) 2019

<https://arxiv.org/pdf/1905.13137.pdf>

Pre-eruption processes: heating, particle acceleration and the formation of a hot channel before the 2012 October 20 M9.0 limb flare

Aaron [Hernandez-Perez](#), [Yang Su](#), [Astrid M. Veronig](#), [Julia K. Thalmann](#), [Peter Gömöry](#), [Bhuwan Joshi](#)

[ApJ](#)

2019

<https://arxiv.org/pdf/1902.08436.pdf>

Seismology of contracting and expanding coronal loops using damping of kink oscillations by mode coupling

D.J. **Pascoe**, A.J.B. Russell, S.A. Anfinogentov, P.J.A. Simões, C.R. Goddard, V.M. Nakariakov, L. Fletcher

A&A 607, A8 2017

http://www2.warwick.ac.uk/fac/sci/physics/staff/research/davidpascoe/seis_contract.pdf

<https://www.aanda.org/articles/aa/pdf/2017/11/aa30915-17.pdf>

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia **Alzate** and Huw Morgan

2017 ApJ 840 103

<http://sci-hub.cc/10.3847/1538-4357/aa6caa>

A statistical study of decaying kink oscillations detected using SDO/AIA

C. R. **Goddard**, G. Nisticò, V. M. Nakariakov, I. V. Zimovets

A&A 2015

<http://arxiv.org/pdf/1511.03558v1.pdf>

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

20-22 Oct – несколько похожих C- и M-вспышек из выходящей на диск южной области 1598

21 Oct – 20:06: M1.3 вспышка, **пересвет** на STEREO-B, $B=11^2/279=0,08$

22 Oct – 18:51: M5.0 вспышка, **пересвет** на STEREO-B, $B=38^2/279=0,27$

22 Oct

Statistical Survey of Coronal Mass Ejections and Interplanetary Type II Bursts

V. **Krupar**^{1,2,3}, J. Magdalenic⁴, J. P. Eastwood⁵, N. Gopalswamy², O. Kruparova³, A. Szabo², and F. Němec

2019 ApJ 882 92

<https://iopscience.iop.org/article/10.3847/1538-4357/ab3345/pdf>

Frequency rising sub-THz emission from solar flare ribbons

E.P. **Kontar**, [G.G. Motorina](#), [N.L.S. Jeffrey](#), [Y.T. Tsap](#), [G.D. Fleishman](#), [A.V. Stepanov](#)

A&A 2018

<https://arxiv.org/pdf/1810.03922.pdf>

Spectral Trends of Solar Bursts at Sub-THz Frequencies

L. O. T. **Fernandes**, P. Kaufmann, E. Correia, C. G. Giménez de Castro, A. S. Kudaka, A. Marun, P. Pereyra, J.-P. Raulin, A. B. M. Valio

[Solar Physics](#) January 2017, 292:21

<http://sci-hub.cc/10.1007/s11207-016-1043-6>

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. **Howard**¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden

2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86
<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>
<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

Evaluation of standoff distance method to determine the coronal magnetic field using CME-driven shocks

K. **Suresh**, A. Shanmugaraju, M. Syed Ibrahim
Astrophysics and Space Science November 2016, 361:360
http://link.springer.com/article/10.1007/s10509-016-2944-4?wt_mc=alerts.TOCjournals

A large-scale search for evidence of quasi-periodic pulsations in solar flares

A. R. **Inglis**, J. Ireland, B. R. Dennis, L. A. Hayes, P. T. Gallagher
ApJ 2016
<https://arxiv.org/pdf/1610.07454v1.pdf>

A Prominence Eruption Driven by Flux Feeding from Chromospheric Fibrils

Quanhao **Zhang**, Rui Liu, Yuming Wang, Chenglong Shen, Kai Liu, Jiajia Liu, and S. Wang
E-print, May 2014; ApJ
http://space.ustc.edu.cn/users/1327636026JDEkU0ZIZUdRWGckUFpSejZrdkU5RzZHZUIzSXpqSkVILg/publication/materials/20140312022408.728_flux_preprint.pdf

23 Oct – 03:21: X1.8 вспышка, **пересвет** на STEREO-B, $B=65 \cdot 2/279=0,47$

23 Oct – SE Sunspot AR1598 erupted at 0322 UT, producing a strong X1.8-class solar flare практически без метровой компоненты. **Gamma**
A CME was observed off the east limb in STEREO-A imagery after the filament eruption near северо-центральной AR 11593.

Highly Energetic Electrons Accelerated in Strong Solar Flares as a Preferred Driver of Sunquakes

H. Wu, **Y. Dai**, **M. D. Ding**
ApJL 2023
<https://arxiv.org/pdf/2301.02865.pdf>

Flare Induced Sunquake Signatures in the Ultraviolet as Observed by the Atmospheric Imaging Assembly

Sean Quinn, **Mihalis Mathioudakis**, **Christopher J. Nelson**, **Ryan O. Milligan**, **Aaron Reid**, **David B. Jess**
ApJ 2021
<https://arxiv.org/pdf/2105.05704.pdf>

A Possible Selection Rule for Flares Causing Sunquakes

Ruizhu **Chen** and Junwei Zhao
2021 ApJ 908 182
<https://arxiv.org/pdf/2103.08158.pdf>
<https://doi.org/10.3847/1538-4357/abd240>

The Lyman-alpha Emission in Solar Flares. I. a Statistical Study on Its Relationship with the 1--8 Å Soft X-ray Emission

Zhichen Jing, **Wuqi Pan**, **Yukun Yang**, **Dechao Song**, **Jun Tian**, **Y. Li**, **X. Cheng**, **Jie Hong**, **M. D. Ding**
ApJ 2020
<https://arxiv.org/pdf/2009.10358.pdf>

White-light Emission and Chromospheric Response by an X1.8-class Flare on 2012 October 23

Kyoko **Watanabe**¹ and Shinsuke Imada²
2020 ApJ 891 88

sci-hub.si/10.3847/1538-4357/ab711b

Estimation of Key Sunquake Parameters through Hydrodynamic Modeling and Cross-Correlation Analysis

John T. [Stefan](#), [Alexander G. Kosovichev](#)

ApJ 2019

<https://arxiv.org/pdf/1911.06839.pdf>

Sunquakes of Solar Cycle 24

I.N. [Sharykin](#), [A.G. Kosovichev](#)

ApJ 2019

<https://arxiv.org/pdf/1911.04197.pdf>

Comparing Long-Duration Gamma-Ray Flares and High-Energy Solar Energetic Particles

G. A. [de Nolfo](#), [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevskaya](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ 2019

<https://arxiv.org/pdf/1905.12878.pdf> File

HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE

Thesis Catalog (2010-2017)

[Allafort](#), A. J.

(2018). PhD thesis, Stanford Univ. File

https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf

Characteristics of Sustained >100 γ -ray Emission Associated with Solar Flares

G. H. [Share](#), R. J. Murphy, A. K. Tolbert, B. R. Dennis, S. M. White, R. A. Schwartz, and A. J. Tylka

ApJ Supplement 2017

http://www.astro.umd.edu/~share/publications/share_2017.pdf File

Statistical Studies of Solar White-Light Flares and Comparisons with Superflares on Solar-type Stars

Kosuke [Namekata](#), [Takahito Sakaue](#), [Kyoko Watanabe](#), [Ayumi Asai](#), [Hiroyuki Maehara](#), [Yuta Notsu](#), [Shota Notsu](#), [Satoshi Honda](#), [Takako Ishii](#), [Kai Ikuta](#), [Daisaku Nogami](#), [Kazunari Shibata](#)

ApJ 2017

<https://arxiv.org/pdf/1710.11325.pdf>

ВОЗМОЖНОСТЬ ГЕНЕРАЦИИ УДАРНОЙ ВОЛНЫ В КОРОНЕ СОЛНЦА ПРИ ОТСУТСТВИИ КОРОНАЛЬНОГО ВЫБРОСА МАССЫ

[ЕСЕЛЕВИЧ](#) В.Г.✉, [ЕСЕЛЕВИЧ](#) М.В.1, [ЗИМОВЕЦ](#) И.В.2,3,4, [ШАРЫКИН](#) И.Н.

АЖ Том: 94Номер: 9 Год: 2017 Страницы: 793-807

Evidence for shock generation in the solar corona in the absence of coronal mass ejections.

[Eselevich](#), V.G., [Eselevich](#), M.V., [Zimovets](#), I.V., [Sharykin](#), I.N.:

2017, Astron. Rep. 61, 805. DOI. ADS.

sci-hub.se/10.1134/S1063772917080030

Investigation of Relationship Between High-Energy X-ray Sources and Photospheric Impact of X1.8 Solar Flare of October 23, 2012

Ivan N [Sharykin](#), Alexander G Kosovichev, Viacheslav M Sadykov, [Ivan V Zimovets](#), [Ivan I Myshyakov](#)

2017

<https://arxiv.org/pdf/1703.03767.pdf>

The Characteristics of Solar X-Class Flares and CMEs: A Paradigm for Stellar Superflares and Eruptions?

Louise K. Harra, Carolus J. Schrijver, Miho Janvier, Shin Toriumi, Hugh Hudson, Sarah Matthews, Magnus M. Woods, Hirohisa Hara, Manuel Guedel, Adam Kowalski, Rachel Osten, Kanya Kusano, Theresa Lueftinger
Solar Phys. 2016 Open Access [File](#)

Analytical solutions of continuity equation for joint collisional and Ohmic energy losses and their effects on hard X-ray emission. II. Mixed energy losses

[Zharkova](#) V.V. and Dobranskis R.R.

MNRAS 2016

<http://mnras.oxfordjournals.org/content/early/2016/03/07/mnras.stw500.full.pdf?keytype=ref&ijkey=zcVKoDhBj8zNW7o>

Irreversible Rapid Changes of Magnetic Field Associated with the 2012 October 23 Circular Near-limb X1.8 Flare

Dandan [Ye](#), Chang Liu, Haimin Wang

Research in Astronomy and Astrophysics (RAA) 2016

<http://arxiv.org/pdf/1602.02080v1.pdf>

On the variation of the scaling exponent of the flare fluence with temperature

M. [Kretzschmar](#)

Solar Phys. 2015

<http://arxiv.org/pdf/1510.01975v1.pdf>

Solar Demon – an approach to detecting flares, dimmings, and EUV waves on SDO/AIA images

Emil [Kraaikamp](#)* and Cis Verbeeck

J. Space Weather Space Clim., 5, A18 (2015) [File](#)

<http://www.swsc-journal.org/articles/swsc/pdf/2015/01/swsc140062.pdf>

On the 2012 October 23 circular ribbon flare: emission features and magnetic topology

Kai [Yang](#), Yang Guo, M. D. Ding

2015

<http://arxiv.org/pdf/1505.02914v1.pdf>

The Relation Between Large-Scale Coronal Propagating Fronts and Type II Radio Bursts

Nariaki V. [Nitta](#), Wei Liu, Nat Gopalswamy, Seiji Yashiro

Solar Phys., 2014

http://www.lmsal.com/nitta/publ/SP_typeII_20140904.pdf

<http://arxiv.org/pdf/1409.4754v1.pdf> [File](#)

Solar Flare Impulsive Phase Emission Observed with SDO/EVE

Michael B. [Kennedy](#)¹, Ryan O. Milligan^{1,2,3}, Mihalis Mathioudakis¹, and Francis P. Keenan

2013 ApJ 779 84

<http://arxiv.org/abs/1310.4649>

25 Oct

The Formation of a U-shaped Filament Due to the Successive Magnetic Reconnection between a Filament and Its Nearby Chromospheric Fibrils

Liping [Yang](#)^{1,2}, Xiaoli Yan^{1,3}, Zhike Xue^{1,3}, Jincheng Wang^{1,3}, Liheng Yang^{1,3}, Zhe Xu^{1,3}, Qiaoling Li^{4,5}, Yian Zhou^{1,3}, Yang Peng^{1,2}, and Xinsheng Zhang^{1,2}

2023 ApJ 952 43

<https://iopscience.iop.org/article/10.3847/1538-4357/acd16e/pdf>

Quantification of the Writhe Number of the Evolution of Solar Filament Axes

Zhenjun **Zhou** (周振军)^{1,2,3,4}, Chaowei Jiang⁵, Hongqiang Song⁶, Yuming Wang³, Yongqiang Hao¹, and Jun Cui¹

2023 ApJ 944 175

<https://iopscience.iop.org/article/10.3847/1538-4357/acb6f8/pdf>

Super Penumbra Chromospheric Flare

[S. Liu](#), [H.Q. Zhang](#), [D. P. Choudhary](#), [A. K. Srivastava](#), [B. N. Dwivedi](#)

Research in Astronomy and Astrophysics (RAA)

2018

<https://arxiv.org/pdf/1806.00232.pdf>

Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars

Johan L. Freiherr [von Forstner](#), [Jingnan Guo](#), [Robert F. Wimmer-Schweingruber](#), [Donald M. Hassler](#), [Manuela Temmer](#), [Mateja Dumbović](#), [Lan K. Jian](#), [Jan K. Appel](#), [Jaša Čalogović](#), [Bent Ehresmann](#), [Bernd Heber](#), [Henning Lohf](#), [Arik Posner](#), [Christian T. Steigies](#), [Bojan Vršnak](#), [Cary J. Zeitlin](#)

JGR

2017

<https://arxiv.org/pdf/1712.07301.pdf>

October 27: A filament eruption across the equator near AR 11600 began near 14h UTC and reached its most intense level 2 hours later. A CME was observed in STEREO-B at 16:25 UTC and in STEREO-A when imagery resumed a couple of hours later.

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha [Sachdeva](#)

Ph.D. **Thesis** 2019

<https://arxiv.org/pdf/1907.12673.pdf>

28 Oct - NW лимбовая эрупция, C1.7 LDE

Predicting the Time-of-Arrival of Coronal Mass Ejections at Earth From Heliospheric Imaging Observations

Carlos Roberto [Braga](#), [Angelos Vourlidas](#), [Guillermo Stenborg](#), [Alisson Dal Lago](#), [Rafael Rodrigues Souza de Mendonça](#), [Ezequiel Echer](#)

JGR 2020

<https://arxiv.org/pdf/2008.09005.pdf>

Observational Characteristics of **CMEs without Low Coronal Signatures**

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

Relationship Between Solar Coronal X-Ray Brightness and Active Region Magnetic Fields: A Study Using High Resolution Observations

Soumitra [Hazra](#), Dibyendu Nandy, B Ravindra

2014

<http://arxiv.org/pdf/1406.1683v1.pdf>

29 Oct

Investigation of Umbral Dots with the New Vacuum Solar Telescope

Kaifan [Ji](#), Xia Jiang, Song Feng, Yunfei Yang, Hui Deng, Feng Wang

Solar Phys. 2015

<http://arxiv.org/pdf/1509.00312v3.pdf>

Investigation of Umbral Dots with the New Vacuum Solar Telescope

Ji **Kaifan**, Jiang Xia, Feng Song, Yang Yunfei, Deng Hui, Wang Feng
Solar Phys. **2015**
<http://arxiv.org/pdf/1509.00312v1.pdf>

31 Oct

[http://solar.gmu.edu/heliophysics/index.php/The ISEST Event List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

2 Nov

Fine-scale structures and material flows of quiescent filaments observed by New Vacuum Solar Telescope

X.L. **Yan**, Z.K. Xue, Y.Y. Xiang, L.H. Yang
Research in Astronomy and Astrophysics **2015**
<http://arxiv.org/pdf/1502.03546v1.pdf>

Constraining hot plasma in a non-flaring solar active region with FOXSI hard X-ray observations

Ishikawa, Shin-nosuke; Glesener, Lindsay; Christe, Steven; Ishibashi, Kazunori; Brooks, David H.; Williams, David R.; Shimojo, Masumi; Sako, Nobuharu; Krucker, S
PASJ (**2014**) 66 (SP1), S15 (1–7)
<http://pasj.oxfordjournals.org/content/66/SP1/S15.full.pdf+html>
<http://arxiv.org/pdf/1509.05288v1.pdf>

First Images from the Focusing Optics X-Ray Solar Imager

Säm **Krucker**^{1,2}, Steven Christe³, Lindsay Glesener¹, Shin-nosuke Ishikawa⁴, Brian Ramsey⁵, Tadayuki Takahashi^{6,7}, Shin Watanabe^{6,7}, Shinya Saito^{6,7}, Mikhail Gubarev⁵, Kiranmayee Kilaru⁵, Hiroyasu Tajima⁸, Takaaki Tanaka⁹, Paul Turin¹, Stephen McBride¹, David Glaser¹, Jose Fermin¹, Stephen White¹⁰, and Robert Lin
2014 ApJ 793 L32

FOXSI Success

Lindsey **Glesener** and Sa"m Krucker
RHESSI Science Nuggets, No. 189, Dec **2012**

3 Nov

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans
2014
<http://arxiv.org/pdf/1409.1422v1.pdf>

5 Nov

Identification of Coronal Holes on AIA/SDO images using unsupervised Machine Learning

Fadil **Inceoglu**, [Yuri Y. Shprits](#), [Stephan G. Heinemann](#), [Stefano Bianco](#)
ApJ **2022**
<https://arxiv.org/pdf/2203.10491.pdf>

7-8 Nov

When do solar erupting hot magnetic flux ropes form?

[A. Nindos](#), [S. Patsourakos](#), [A. Vourlidas](#), [X. Cheng](#), [J. Zhang](#)
A&A **2020**
<https://arxiv.org/pdf/2008.04380.pdf>

Dynamics of a solar prominence tornado observed by SDO/AIA on 2012 November 7-8
I. [Mghebrishvili](#), T. V. Zaqarashvili, [V. Kukhianidze](#), [G. Ramishvili](#), [B. Shergelashvili](#), [A. Veronig](#), [S. Poedts](#)
ApJ 2015
<http://arxiv.org/pdf/1508.06788v1.pdf>

8 Nov – 02:31: M1.7 вспышка, **пересвет** на STEREO-B, $B=24*2/278=0,17$

8 Nov, 02:40 - a new northeastern-limb sunspot unleashed an M1.7-class LDE flare.
Слабое задержанное возрастание протонов, возможно, от эрупции залимбового волокна.

Konus- Wind and Helicon- Coronas-F observations of solar flares

[Pal'shin](#), V. D.; [Charikov, Yu. E.](#); [Aptekar, R. L.](#); [Golenetskii, S. V.](#); [Kokomov, A. A.](#); [Svinkin, D. S.](#); [Sokolova, Z. Ya.](#); [Ulanov, M. V.](#); [Frederiks, D. D.](#); [Tsvetkova, A. E.](#)
Geomagnetism and Aeronomy, Volume 54, Issue 7, pp.943-948 2014
<https://arxiv.org/pdf/1412.2015.pdf>
<https://link.springer.com/content/pdf/10.1134/S0016793214070093.pdf>

Observation of Magnetic reconnection at a 3D null point associated with a solar eruption

J. Q. [Sun](#), J. Zhang, K. Yang, X. Cheng, M. D. Ding
ApJL 2016
<http://arxiv.org/pdf/1609.06787v1.pdf>

How Common are Hot Magnetic Flux Ropes in the Low Solar Corona? A Statistical Study of EUV Observations

A. [Nindos](#), S. Patsourakos, A. Vourlidas, C. Tagikas
ApJ 2015
<http://arxiv.org/pdf/1507.03766v1.pdf>

9 Nov - A partial halo CME was observed after a filament eruption in the southern hemisphere. During the early hours, a magnetic filament located behind the sun's southeastern limb erupted, hurling a bright coronal mass ejection (CME) into space:
Еще заметная центральная-южная эрупция волокна после 13 UT.

A magnetic cloud prediction model for forecasting space weather relevant properties of Earth-directed coronal mass ejections

Sanchita [Pal](#), [Dibyendu Nandy](#), [Emilia K J Kilpua](#)
A&A 2022
<https://arxiv.org/pdf/2203.05231.pdf>

Connecting 3D evolution of Coronal Mass Ejections to their Source Regions

[Satabdwa Majumdar](#), [Vaibhav Pant](#), [Ritesh Patel](#), [Dipankar Banerjee](#)
ApJ 2020
<https://arxiv.org/pdf/2007.00923.pdf>

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha [Sachdeva](#)
Ph.D. **Thesis** 2019
<https://arxiv.org/pdf/1907.12673.pdf>

Numerical simulations of ICME-ICME interactions

Tatiana [Niembro](#), [Alejandro Lara](#), [Ricardo F. González](#), [J. Cantó](#)
2018

<https://arxiv.org/pdf/1801.03136.pdf>

AN ANALYTICAL MODEL OF INTERPLANETARY CORONAL MASS EJECTION INTERACTIONS

T. **Niembro**^{1,3}, J. Cantó², A. Lara³, and R. F. González
2015 ApJ 811 69

9-10 Nov

Investigating the Variations in Compositions and Heating of Interacting ICMEs

Nandita **Srivastava**, Zavkiddin Mirtoshev, and Wageesh Mishra
Front. Astron. Space Sci., 10 :1154612 2023
<https://doi.org/10.3389/fspas.2023.1154612>
<https://www.frontiersin.org/articles/10.3389/fspas.2023.1154612/pdf>

Assessing the collision nature of coronal mass ejections in the inner heliosphere

Wageesh **Mishra**, [Yuming Wang](#), [Nandita Srivastava](#), [Chenglong Shen](#)
ApJ Supplement Series 2017
<https://arxiv.org/pdf/1707.08299.pdf>

Evolution and Consequences of Coronal Mass Ejections in the Heliosphere

[Wageesh Mishra](#)

The **thesis** was submitted in Mar 2015 to MLS university, Udaipur, for which the university granted the degree in Jan 2016
<https://arxiv.org/pdf/2204.09879.pdf>

Evolution and Consequences of Interacting CMEs of 2012 November 9-10 using STEREO/SECCHI and In Situ Observations

Wageesh **Mishra**, Nandita Srivastava, D. Chakrabarty
Solar Phys., 2014
<http://arxiv.org/pdf/1408.0352v1.pdf>

10 Nov - A small CME, possibly with a weak Earth directed component, was observed following a filament eruption near AR 11608 starting at approx. 05h UT

Self-consistent modeling of the energetic storm particle event of 10 November 2012

A. **Afanasiev**¹, R. Vainio¹, D. Trotta², S. Nyberg¹, N. Talebpour Sheshvan¹, H. Hietala³, and N. Dresing¹
A&A 2023
<https://arxiv.org/pdf/2310.00993.pdf>

An overview of HMI off-disk flare observations

[Dennis Fremstad](#), [Juan Camilo Guevara Gómez](#), [Hugh Hudson](#), [Juan Carlos Martínez Oliveros](#)
A&A 2023
<https://arxiv.org/pdf/2302.13632.pdf>

Solar sources of interplanetary magnetic clouds leading to helicity prediction

Roger K. **Ulrich**, [Pete Riley](#), [T. Tran](#)
Space Weather 2018
<https://arxiv.org/ftp/arxiv/papers/1811/1811.03560.pdf>

The Interaction of Successive Coronal Mass Ejections: A **Review**

Noé **Lugaz**, Manuela Temmer, Yuming Wang, Charles J. Farrugia
Sol Phys (2017) 292: 64. **File**
<http://sci-hub.cc/10.1007/s11207-017-1091-6>

11 Nov – >12:30, Существенная центральная-южная эрупция

12 Nov – 23:36: M2.0 вспышка, **пересвет** на STEREO-B, $B=7*2/278=0,05$

11 Nov

Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars

Johan L. Freiherr **von Forstner**, [Jingnan Guo](#), [Robert F. Wimmer-Schweingruber](#), [Donald M. Hassler](#), [Manuela Temmer](#), [Mateja Dumbović](#), [Lan K. Jian](#), [Jan K. Appel](#), [Jaša Čalogović](#), [Bent Ehresmann](#), [Bernd Heber](#), [Henning Lohf](#), [Arik Posner](#), [Christian T. Steigies](#), [Bojan Vršnak](#), [Cary J. Zeitlin](#)

JGR 2017

<https://arxiv.org/pdf/1712.07301.pdf>

12 Nov. – 23:28 очень **импульсная** M2 вспышка, компактная

An interplanetary shock wave (probably the leading edge of a CME) hit Earth's magnetic field on Nov. 12th at approximately 2300 UT

The Flare Likelihood and Region Eruption Forecasting (FLARECAST) Project: Flare forecasting in the big data & machine learning era

Review

[M. K. Georgoulis](#), [D. S. Bloomfield](#), [M. Piana](#), [A. M. Massone](#), [M. Soldati](#), [P. T. Gallagher](#), [E. Pariat](#), [N. Vilmer](#), [E. Buchlin](#), [F. Baudin](#), [A. Csillaghy](#), [H. Sathiapal](#), [D. R. Jackson](#), [P. Alingery](#), [F. Benvenuto](#), [C. Campi](#), [K. Florios](#), [C. Gontikakis](#), [C. Guennou](#), [J. A. Guerra](#), [I. Kontogiannis](#), [V. Latorre](#), [S. A. Murray](#), [S.-H. Park](#), [S. von Stachelski](#), [A. Torbica](#), [D. Vischi](#), [M. Worsfold](#)

Journal of Space Weather and Space Climate, 2021

<https://arxiv.org/pdf/2105.05993.pdf>

Fitting and Reconstruction of Thirteen Simple Coronal Mass Ejections

[Nada Al-Haddad](#), [Teresa Nieves-Chinchilla](#), [Neel P. Savani](#), [Noe Lugaz](#), [Ilia I. Roussev](#)
Solar Phys. 2018

<https://arxiv.org/pdf/1804.02359.pdf>

Improved magnetogram calibration of SMFT and its comparison with the HMI

Xianyong **Bai**, Yuanyong Deng, Fei Teng, Jiangtao Su, Xinjie Mao, Guoping Wang
MNRAS, 2014

<http://arxiv.org/pdf/1409.4869v1.pdf>

12-13 Nov

Testing and Improving a Set of Morphological Predictors of Flaring Activity

Ioannis **Kontogiannis**, [Manolis K. Georgoulis](#), [Sung-Hong Park](#), [Jordan A. Guerra](#)

Solar Phys. June 2018, 293:96

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1317-2.pdf>

The Broken Lane of a Type II Radio Burst Caused by Collision of a Coronal Shock with a Flare Current Sheet

Guannan **Gao**, Min Wang, Ning Wu, Jun Lin, E. Ebenezer, Baolin Tan

Solar Phys. 2016

<http://link.springer.com/article/10.1007/s11207-016-1007-x>

Magnetic Flux Cancellation as the Trigger of Solar Quiet-Region Coronal Jets

Navdeep K. **Panesar**, Alphonse C. Sterling, Ronald L. Moore, Prithi Chakrapani

ApJL 2016

<https://arxiv.org/pdf/1610.08540v1.pdf> File

13 Nov – 02:06: M6.0? вспышка, **пересвет** на STEREO-B, $V=31,5*2/278=0,23$

По картинке никак не M6.06 скорее ~M3.5. Рядом ещё более импульсные вспышки. Но у них разница между картинкой и таблицей небольшая. **Взял M3.5.**

13 Nov – 05:51: M2.5 вспышка, **пересвет** на STEREO-B, $V=9*2/278=0,06$ сомнительный, прилиб

13 Nov. – **Total Solar Eclipse** 01:58 еще одна очень **импульсная M6** вспышка и еще несколько аналогичных меньшего балла. **Gamma**

Future High-Resolution and High-Cadence Observations for Unraveling Small-Scale Explosive Solar Features

[Alphonse C. Sterling](#), [Ronald L. Moore](#), [Navdeep K. Panesar](#), [Tanmoy Samanta](#), [Sanjiv K. Tiwari](#), [Sabrina L. Savage](#)

Frontiers 2023

<https://arxiv.org/pdf/2302.13179.pdf>

A Total Solar Eclipse Earth-Based Mission: Multi-wavelength Observations from Land, Sea and Air to Probe the Critical middle Corona

[Shadia R Habbal](#), [Benjamin Boe](#), [Colby Haggerty](#), [Adalbert Ding](#)

White Paper was submitted to the 2024 Solar and Space Physics (Heliophysics) Decadal Survey 2023

<https://arxiv.org/ftp/arxiv/papers/2302/2302.11781.pdf>

Automatic Detection of Interplanetary Coronal Mass Ejections in Solar Wind In Situ Data

Hannah T. [Rüdisser](#), [Andreas Windisch](#), [Ute V. Amerstorfer](#), [Christian Möstl](#), [Tanja Amerstorfer](#), [Rachel L. Bailey](#), [Martin A. Reiss](#)

Space Weather 2022

<https://arxiv.org/pdf/2205.03578.pdf>

Onset of the Magnetic Explosion in Solar Coronal Jets in Quiet Regions on the Central Disk

[Navdeep K. Panesar](#), [Ronald L. Moore](#), [Alphonse C. Sterling](#)

ApJ 2020

<https://arxiv.org/pdf/2006.04253.pdf>

Validation of MHD Model Predictions of the Corona with LASCO-C2 Polarized Brightness Images

Philippe [Lamy](#), Olivier Floyd, Zoran Mikić, Pete Riley

[Solar Physics](#) October 2019, 294:162

<https://doi.org/10.1007/s11207-019-1549-9>

HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE **Thesis Catalog** (2010-2017)

[Allafort](#), A. J.

(2018). PhD thesis, Stanford Univ. File

https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf

Tethered Prominence-CME Systems Captured during the 2012 November 13 and 2013 November 3 Total Solar Eclipses

Miloslav [Druckmüller](#)¹, Shadia R. Habbal², Nathalia Alzate³, and Constantinos Emmanouilidis⁴

2017 ApJL 851 L41

<http://sci-hub.tw/10.3847/2041-8213/aa9ed5>

Three-Dimensional Simulations of Tearing and Intermittency in Coronal Jets

P. F. **Wyper**, C. R. DeVore, J. T. Karpen, B. J. Lynch

ApJ 2016

<http://arxiv.org/pdf/1607.00692v1.pdf>

Dynamics of Large-scale Coronal Structures as Imaged during the 2012 and 2013 Total Solar Eclipses

Nathalia **Alzate**¹, Shadia R. Habbal², Miloslav Druckmüller³, Constantinos Emmanouilidis⁴, and Huw Morgan⁵

2017 ApJ 848 84

Large Scale Coronal Structures Imaged During the 2012/2013 Total Solar Eclipses

Nathalia **Alzate**, Huw Morgan, Shadia R. Habbal, Miloslav Druckmüller, Constantinos Emmanouilidis
UKSP Nuggets #80, 2017

www.uksolphys.org/?p=13114

Decimetric and metric digital solar radio spectrometers of the Yunnan Astronomical Observatories and the first-light results

G. **Gao**, M. Wanga, L. Donga, N. Wu, J. Lin

New Astron. Volume 30, July 2014, Pages 68–78

<http://www.sciencedirect.com/science/article/pii/S1384107614000153>

Global Energetics of Solar Flares: IV. Coronal Mass Ejection Energetics

Markus J. **Aschwanden**

ApJ 2016

<http://arxiv.org/pdf/1605.04952v1.pdf> File

http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf

13-14 Nov

Structure and Dynamics of the 13/14 November 2012 Eclipse White-Light Corona

Jay M. **Pasachoff**, Vojtech Rusin, Metod Saniga, Bryce A. Babcock, Muzhou Lu, Allen B. Davis, Ronald F. Dantowitz, Pavlos Gaintatzis, John H. Seiradakis, Aristeidis Voulgaris, Daniel B. Seaton, Kazuo Shiota
2014

<http://arxiv.org/pdf/1412.1155v1.pdf>

14 Nov – Геомагнитная буря, на хвостовой части ICME. Dst ~ - 108 нТл

On the effect of geomagnetic storms on relativistic electrons in the outer radiation belt:

Van Allen Probes observations[†]

Pablo. S. **Moya**, Víctor A. Pinto, David G. Sibeck, Shrikanth G. Kanekal, Daniel N. Baker

JGR 2017

[http://sci-](http://sci-hub.cc/http://onlinelibrary.wiley.com/doi/10.1002/2017JA024735/abstract;jsessionid=48E043E86C22084A1908FD5A8AEDAFc.f03t01)

[hub.cc/http://onlinelibrary.wiley.com/doi/10.1002/2017JA024735/abstract;jsessionid=48E043E86C22084A1908FD5A8AEDAFc.f03t01](http://onlinelibrary.wiley.com/doi/10.1002/2017JA024735/abstract;jsessionid=48E043E86C22084A1908FD5A8AEDAFc.f03t01)

The Standardisation and Sequencing of Solar Eclipse Images for the Eclipse Megamovie Project

Larisa D. Krista, Scott W. McIntosh

Solar Phys. 2015

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

14-23 Nov

Multi-spacecraft Observations of the Evolution of Interplanetary Coronal Mass Ejections between 0.3 and 2.2 au: Conjunctions with the Juno Spacecraft

Emma E. **Davies**^{1,2}, Réka M. Winslow¹, Camilla Scolini^{1,3}, Robert J. Forsyth², Christian Möstl⁴, Noé Lugaz¹, and Antoinette B. Galvin¹

2022 ApJ 933 127

<https://iopscience.iop.org/article/10.3847/1538-4357/ac731a/pdf>

16 Nov >07:30- заметная эрупция SE (волокон?), C1 LDE

Observational Characteristics of CMEs without Low Coronal Signatures

E. **D'Huys**, D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

17 Nov

Automated Driving for Global Nonpotential Simulations of the Solar Corona

Anthony R. **Yeates**¹ and Prantika Bhowmik¹

2022 ApJ 935 13

<https://iopscience.iop.org/article/10.3847/1538-4357/ac7de4/pdf>

Relationship Between Solar Coronal X-Ray Brightness and Active Region Magnetic Fields: A Study Using High Resolution Observations

Soumitra **Hazra**, Dibyendu Nandy, B Ravindra

2014

<http://arxiv.org/pdf/1406.1683v1.pdf>

18 Nov

Detection of Energy Cutoffs in Flare-accelerated Electrons

Fanxiaoyu **Xia**^{1,2}, Yang Su^{1,2}, Wen Wang³, Linghua Wang³, Alexander Warmuth⁴, Weiqun Gan^{1,2}, and Youping Li^{1,2}

2021 ApJ 908 111

<https://iopscience.iop.org/article/10.3847/1538-4357/abce5c/pdf>

CHALLENGING SOME CONTEMPORARY VIEWS OF CORONAL MASS EJECTIONS. II. THE CASE FOR ABSENT FILAMENTS

T. A. **Howard**¹, C. E. DeForest¹, U. G. Schneck², and C. R. Alden

2017 ApJ 834 86 DOI 10.3847/1538-4357/834/1/86

<http://c.brightcove.com/article/10.3847/1538-4357/834/1/86/pdf>

<http://iopscience.iop.org/sci-hub.cc/0004-637X/834/1/86/>

18-21 Nov

Case studies of multi-day 3He-rich solar energetic particle periods

Nai-hwa **Chen**, Radoslav. Bucik, Davina. E. Innes, Glenn. M. Mason

A&A 2015

<http://arxiv.org/pdf/1506.04369v1.pdf>

18-25 Nov

On the use of relative field line helicity as an indicator for solar eruptivity

[K. Moraitis](#), [S. Patsourakos](#), [A. Nindos](#), [J.K. Thalmann](#), [É. Pariat](#)

A&A 2023
<https://arxiv.org/pdf/2312.13950.pdf>

Magnetic Helicity and Free Magnetic Energy as Tools to Probe Eruptions in two Differently Evolving Solar Active Regions

[E. Liokati](#), [A. Nindos](#), [M. K. Georgoulis](#)

A&A 2023
<https://arxiv.org/pdf/2301.08495.pdf>

20 Nov – 12:46: M1.7 вспышка, **пересвет** на STEREO-A, $A=19 \times 2/312=0,12$

19 Nov

Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars

Johan L. Freiherr [von Forstner](#), [Jingnan Guo](#), [Robert F. Wimmer-Schweingruber](#), [Donald M. Hassler](#), [Manuela Temmer](#), [Mateja Dumbović](#), [Lan K. Jian](#), [Jan K. Appel](#), [Jaša Čalogović](#), [Bent Ehresmann](#), [Bernd Heber](#), [Henning Lohf](#), [Arik Posner](#), [Christian T. Steigies](#), [Bojan Vršnak](#), [Cary J. Zeitlin](#)

JGR 2017
<https://arxiv.org/pdf/1712.07301.pdf>

20 Nov - The largest flare of the day, an impulsive M1.7 event at 12:41 UTC, occurred in a region at the northwest limb, probably AR 11611. **A filament eruption near AR 11619 began at 11:12 UTC and was associated with an asymmetric full halo CME** observed in LASCO imagery a few hours later. The CME was visible in STEREO imagery from 12:09 UTC

An overview of HMI off-disk flare observations

[Dennis Fremstad](#), [Juan Camilo Guevara Gómez](#), [Hugh Hudson](#), [Juan Carlos Martínez Oliveros](#)

A&A 2023
<https://arxiv.org/pdf/2302.13632.pdf>

Solar Flare Effects on the Earth's Lower Ionosphere

[Laura A. Hayes](#), [Oscar S.D. O'Hara](#), [Sophie A. Murray](#), [Peter T. Gallagher](#)

Solar Phys. 2021
<https://arxiv.org/pdf/2109.06558.pdf>

Temperature of source regions of 3He-rich impulsive solar energetic particle events

N.-H. [Chen](#), [R. Bučík](#), [R.-S. Kim](#)

Space Weather of the Heliosphere: Processes and Forecasts Proceedings IAU Symposium No. 335, 2017 2017

<https://arxiv.org/pdf/1712.07285.pdf>

Statistical Studies of Solar White-Light Flares and Comparisons with Superflares on Solar-type Stars

Kosuke [Namekata](#), [Takahito Sakaue](#), [Kyoko Watanabe](#), [Ayumi Asai](#), [Hiroyuki Maehara](#), [Yuta Notsu](#), [Shota Notsu](#), [Satoshi Honda](#), [Takako Ishii](#), [Kai Ikuta](#), [Daisaku Nogami](#), [Kazunari Shibata](#)

ApJ 2017
<https://arxiv.org/pdf/1710.11325.pdf>

On the nature of off-limb flare continuum sources detected by SDO/HMI

P. [Heinzel](#), [L. Kleint](#), [J. Kasparova](#), [S. Krucker](#)

ApJ 2017
<https://arxiv.org/pdf/1709.06377.pdf>

Testing the current paradigm for space weather prediction with heliospheric imagers

Luke A. **Barnard**, Curt A. de Koning, Christopher J. Scott, Mathew J. Owens, Julia Wilkinson, Jackie A. Davies

Space Weather Volume 15, Issue 6 June 2017 Pages 782–803

<http://onlinelibrary.wiley.com/doi/10.1002/2017SW001609/full>

<http://sci-hub.cc/10.1002/2017SW001609>

Co-Spatial White Light and Hard X-Ray Flare Footpoints Seen Above the Solar Limb

Säm **Krucker**^{1,2}, Pascal Saint-Hilaire², Hugh S. Hudson^{2,3}, Margit Haberreiter⁴, Juan Carlos Martinez-Oliveros², Martin D. Fivian², Gordon Hurford^{1,2}, Lucia Kleint¹, Marina Battaglia¹, Matej Kuhar¹, and Nicolas G. Arnold

2015 ApJ 802 19

20-21 Nov – Несколько полу-импульсных C-M вспышек и средних эрупций; The magnetic canopy of big sunspot AR1618 is crackling with M-class solar flares. Some of them might have propelled faint coronal mass ejections (CMEs) toward Earth. If so, the impacts would likely commence on Nov. 23rd, with a chance of high-latitude geomagnetic storms. While most of the ejecta from the CME associated with the M3 event in AR 11618 was directed eastwards, components of the CME could be Earth directed.

21 Nov

Rapid Evolution of the Solar Atmosphere During a Microflare Observed with EIS: Hints of Chromospheric Magnetic Reconnection

Jeffrey W. **Brosius**

EIS Nugget - November 2013, http://solarb.mssl.ucl.ac.uk/SolarB/nuggets/nugget_2013nov.jsp

November 22: A filament eruption was observed starting in the southeast quadrant just after 08h UTC. LASCO C3 observed a faint and slow CME off the east limb from 10:42 UTC while the CME was visible in STEREO imagery from 10:09 UTC. There may be a very weak Earth directed component associated with this CME.

November 23: A filament eruption in the southern hemisphere was observed starting at 11:42 and peaking just after 14h UTC. In LASCO imagery it is difficult to determine if this CME was geoeffective due to a CME with an origin in an active region behind the northeast limb occurring a little earlier. STEREO imagery indicate that a faint component of the CME could be Earth directed.

Multi-spacecraft Observations of the Evolution of Interplanetary Coronal Mass Ejections between 0.3 and 2.2 au: Conjunctions with the Juno Spacecraft

Emma E. **Davies**^{1,2}, Réka M. Winslow¹, Camilla Scolini^{1,3}, Robert J. Forsyth², Christian Möstl⁴, Noé Lugaz¹, and Antoinette B. Galvin¹

2022 ApJ 933 127

<https://iopscience.iop.org/article/10.3847/1538-4357/ac731a/pdf>

23 Nov

Initiation and Early Kinematic Evolution of Solar Eruptions

X. **Cheng**, J. Zhang, B. Kliem, T. {Török}, C. Xing, Z. J. Zhou, B. Inhester, M. D. Ding

ApJ 2020

<https://arxiv.org/pdf/2004.03790.pdf>

Dynamics of solar Coronal Mass Ejections: forces that impact their propagation

Nishtha **Sachdeva**

Ph.D. **Thesis** 2019

<https://arxiv.org/pdf/1907.12673.pdf>

The Effects of Uncertainty in Initial CME Input Parameters on Deflection, Rotation, Bz, and Arrival Time Predictions

C. **Kay** , [N. Gopalswamy](#)

JGR v. 123 September **2018** Pages 7220-7240

sci-hub.tw/10.1029/2018JA025780

Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and **Online Catalog**

Patrick I. **McCauley**, Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves

Solar Phys. **2015**

<http://arxiv.org/pdf/1505.02090v1.pdf>

24 Nov

Ensemble CME Modeling Constrained by Heliospheric Imager Observations

L. **Barnard** , [M. J. Owens](#) , [C. J. Scott](#) , [C. A. de Koning](#)

AGU Advances [Volume1, Issue3](#) September **2020** e2020AV000214

<https://doi.org/10.1029/2020AV000214>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020AV000214>

24-25 Nov – Forbush ~3%

25 Nov

Identification of Low Coronal Sources of "Stealth" Coronal Mass Ejections Using New Image Processing Techniques

Nathalia **Alzate** and Huw Morgan

2017 ApJ 840 103

<http://sci-hub.cc/10.3847/1538-4357/aa6caa>

26 Nov - A **filament eruption** was observed south of Region 1620 in SDO/AIA 304 imagery beginning at 03:43Z. A CME hit Earth's magnetic field at approximately 05:00

Twisting/Swirling Motions During a Prominence Eruption as seen from SDO/AIA

V. **Pant**, [A. Datta](#), [D. Banerjee](#), [K. Chandrashekhar](#), [S. Ray](#)

ApJ **2018**

<https://arxiv.org/pdf/1804.10767.pdf>

27 Nov – 15:56: M1.6 вспышка, **пересвет** на STEREO-A, $A=27 \cdot 2/312=0,17$

21:26: M1.0 вспышка, **пересвет** на STEREO-A, $A=9,5 \cdot 2/312=0,06$

27 Nov - Several interesting events were observed during the day. A **filament eruption** near AR 11621 began just after midnight and was later on associated with a partial halo CME in LASCO imagery. There's a chance this CME could reach Earth on November 30. A very slow filament eruption across the equator and mostly in the western hemisphere was observed during the morning. STEREO imagery indicate weak components of the associated CME could be Earth directed. Another filament eruption was observed beginning at 20:45 UTC between AR 11621 and AR S2080, however, the associated CME does not appear to have any Earth directed component. **Gamma**

Comparing Long-Duration Gamma-Ray Flares and High-Energy Solar Energetic Particles

G. A. [de Nolfo](#), [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevskaya](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ 2019

<https://arxiv.org/pdf/1905.12878.pdf> File

HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE **Thesis Catalog** (2010-2017)

[Allafort](#), A. J.

(2018). PhD thesis, Stanford Univ. File

https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf

Characteristics of Sustained >100 γ -ray Emission Associated with Solar Flares

G. H. [Share](#), R. J. Murphy, A. K. Tolbert, B. R. Dennis, S. M. White, R. A. Schwartz, and A. J. Tylka
ApJ Supplement 2017

http://www.astro.umd.edu/~share/publications/share_2017.pdf File

28 Nov – 21:41: M2.2 вспышка, **пересвет** на STEREO-A, $A=33*2/312=0,21$

28 Nov

Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars

Johan L. Freiherr [von Forstner](#), [Jingnan Guo](#), [Robert F. Wimmer-Schweingruber](#), [Donald M. Hassler](#), [Manuela Temmer](#), [Mateja Dumbović](#), [Lan K. Jian](#), [Jan K. Appel](#), [Jaša Čalogović](#), [Bent Ehresmann](#), [Bernd Heber](#), [Henning Lohf](#), [Arik Posner](#), [Christian T. Steigies](#), [Bojan Vršnak](#), [Cary J. Zeitlin](#)

JGR 2017

<https://arxiv.org/pdf/1712.07301.pdf>

29 Nov – 12:16: C5.8 **пересвет** $A=21*2/312=0,134 \leftarrow 16s \ 8s \rightarrow A=21/312=0,067$

2-4 Dec

Space weather: the solar perspective -- an update to Schwenn (2006) **Review**

[Manuela Temmer](#)

Living Reviews in Solar Physics 2021

<https://arxiv.org/pdf/2104.04261.pdf>

3 Dec

The nonpotentiality of coronae of solar active regions, the dynamics of the surface magnetic field, and the potential for large flares

C.J. [Schrijver](#)

ApJ 2016

<http://arxiv.org/pdf/1602.07244v1.pdf>

December 4-17

3D Global Coronal Density Structure and Associated Magnetic Field near Solar Maximum

Maxim [Kramar](#), Vladimir Airapetian, Haosheng Lin

2016

<http://arxiv.org/pdf/1604.00535v1.pdf>

6 Dec – утром крупная эрупция большого SW лимбового волокна

7 Dec - Magnetic fields around departing sunspot AR1621 became unstable and erupted during the late hours of Dec. 7th, hurling a bulb of plasma off the sun's western limb.

Transverse Coronal-Loop Oscillations Induced by the Non-radial Eruption of a Magnetic Flux Rope

Q. M. Zhang, [J. L. Chen](#), [S. T. Li](#), [L. Lu](#), [D. Li](#)

Solar Phys. 2022

<https://arxiv.org/pdf/2201.07389.pdf>

A revised cone model and its application to non-radial prominence eruptions

[Q. M. Zhang](#)

A&A Letter 2021

<https://arxiv.org/pdf/2108.11831.pdf>

9 Dec – 14 Dec

Recent Voyager Evidence for Rapid Transport of Flare-Generated Disturbances by Polar Coronal Hole Streams

D S Intriligator¹, W D Miller¹, J Intriligator^{1,2}, W Webber³, W Sun⁴, T Detman¹, M Dryer¹ and C Deehr⁴

[Journal of Physics: Conference Series](#), Volume 900, Number 1 012010 2017

<http://iopscience.iop.org/article/10.1088/1742-6596/900/1/012010/pdf>

12 Dec

EUV imaging and spectroscopy for improved space weather forecasting

Review

Leon [Golub](#)^{1*}, Peter Cheimets¹, Edward E. DeLuca¹, Chad A. Madsen¹, Katharine K. Reeves¹, Jenna Samra¹, Sabrina Savage², Amy Winebarger² and Alexander R. Brucoleri³

J. Space Weather Space Clim. 2020, 10, 37

<https://doi.org/10.1051/swsc/2020040>

<https://www.swsc-journal.org/articles/swsc/pdf/2020/01/swsc200031.pdf>

12-15 Dec

Testing and Improving a Set of Morphological Predictors of Flaring Activity

Ioannis [Kontogiannis](#), [Manolis K. Georgoulis](#), [Sung-Hong Park](#), [Jordan A. Guerra](#)

Solar Phys. June 2018, 293:96

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1317-2.pdf>

14-15 Dec – небольшое возрастание потока протонов (SEP) на 10 МэВ

17 Dec

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

<http://arxiv.org/pdf/1409.1422v1.pdf>

18 Dec

Traveling ionospheric disturbances as huge natural lenses: Solar radio emission focusing effect,

[Koval](#), A., Y. Chen, A. Stanislavsky, and Q.-H. Zhang

(2017). J. Geophys. Res. Space Physics, 122 DOI: [10.1002/2017JA024080](https://doi.org/10.1002/2017JA024080)

<http://sci-hub.cc/10.1002/2017JA024080>

Observational Characteristics of CMEs without Low Coronal Signatures

E. [D'Huys](#), D.B. Seaton, S. Poedts, D. Berghmans

2014

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