

2013

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

ftp://ftp.sec.noaa.gov/pub/warehouse/2013/2013_plots/xray/
ftp://ftp.sec.noaa.gov/pub/warehouse/2013/2013_plots/proton/

1 Jan

Fast Solar Image Classification Using Deep Learning and its Importance for Automation in Solar Physics

John A. [Armstrong](#), [Lyndsay Fletcher](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1905.13575.pdf>

Patterns of Activity in a Global Model of a Solar Active Region

Stephen J. [Bradshaw](#), Nicholeen M. Viall

2016

<http://arxiv.org/pdf/1603.06670v1.pdf>

2 Jan

Evolution of the flow field in decaying active regions, Transition from a moat flow to a supergranular flow

Hanna [Strecker](#), [Nazaret Bello González](#)

A&A 2018

<https://arxiv.org/pdf/1811.01607.pdf>

3 Jan

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

2013 ApJ 776 57

4 Jan

Automated Detection of Solar Radio Bursts using a Statistical Method

Dayal [Singh](#), [K. Sasikumar Raja](#), [Prasad Subramanian](#), [R. Ramesh](#), [Christian Monstein](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1906.11780.pdf>

4-12 Jan

Decayless low-amplitude kink oscillations: a common phenomenon in the solar corona?

S. A. [Anfinogentov](#), V. M. Nakariakov, G. Nisticò

A&A 2015

<http://arxiv.org/pdf/1509.05519v1.pdf>

5 Jan - 09:31, M1.7, пересвет, STREO-B $B=20 \cdot 2/278 = 0.14$

5 Jan

Motion magnification in coronal seismology

Sergey **Anfinogentov**, Valery M. Nakariakov
Solar Phys. **2016**
<https://arxiv.org/pdf/1611.01790v1.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>

Differences in the development of the initial phase of the formation of two types of coronal mass ejections

V. G. **Eselevich**, M. V. Eselevich
Cosmic Research, January **2015**, Volume 53, Issue 1, pp 21-30
Kosmicheskie Issledovaniya, **2015**, Vol. 53, No. 1, pp. 24–34.

On the possible reason for the formation of impulsive coronal mass ejections

D.V. **Romanov**, K.V. Romanov, V.A. Romanov, N.V. Kucherov, V.G. Eselevich, , M.V. Eselevich
Advances in Space Research, Volume 55, Issue 3, 1 February **2015**, Pages 949–957
<http://www.sciencedirect.com/science/article/pii/S027311771400581X>

Instantaneous Flare Properties

Hugh **Hudson**
RHESSI Nuggets, No. 2018, **2014**
http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Instantaneous_Flare_Properties

Физические отличия в начальной фазе формирования двух типов корональных выбросов массы

М.В.**Еселевич**
ИКИ-2014, Сессия: Солнце
<http://plasma2014.cosmos.ru/presentations>

Temperature Evolution of a Magnetic Flux Rope in a Failed Solar Eruption

H. Q. **Song**, J. Zhang, X. Cheng, Y. Chen, R. Liu, Y. M. Wang, and B. Li
2014 ApJ 784 48

6 Jan Эрупция большого волокна

Modelling a multi-spacecraft coronal mass ejection encounter with EUHFORIA

[E. Asvestari](#), [J. Pomoell](#), [E. Kilpua](#), [S. Good](#), [T. Chatzistergos](#), [M. Temmer](#), [E. Palmerio](#), [S. Poedts](#), [J. Magdalenic](#)
A&A **2021**
<https://arxiv.org/pdf/2105.11831.pdf>

7 Jan

Excitation of kink oscillations of coronal loops: statistical study

Zimovets, I.V., Nakariakov, V.M.
A&A, **2015**
E-print, Dec **2014**

8 Jan

Generic Magnetic Field Intensity Profiles of Interplanetary Coronal Mass Ejections at Mercury, Venus, and Earth From Superposed Epoch Analyses

Miho [Janvier](#), [Reka M. Winslow](#), [Simon Good](#), [Elise Bonhomme](#), [Pascal Démoulin](#), [Sergio Dasso](#), [Christian Möstl](#), [Noé Lugaz](#), [Tanja Amerstorfer](#), [Elie Soubrié](#), [Peter D. Boakes](#)

JGR Volume124, Issue2, February 2019, Pages 812-836

[sci-hub.tw/10.1029/2018JA025949](https://doi.org/10.1029/2018JA025949)

<https://arxiv.org/pdf/1901.09921.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](https://doi.org/10.3847/1538-4357/aaf1ce)

8-10 Jan

Modelling a multi-spacecraft coronal mass ejection encounter with EUHFORIA

[E. Asvestari](#), [J. Pomoell](#), [E. Kilpua](#), [S. Good](#), [T. Chatzistergos](#), [M. Temmer](#), [E. Palmerio](#), [S. Poedts](#), [J. Magdalenic](#)

A&A 2021

<https://arxiv.org/pdf/2105.11831.pdf>

Heliospheric Evolution of Magnetic Clouds

Bojan [Vršnak](#), [Tanja Amerstorfer](#), [Mateja Dumbović](#), [Martin Leitner](#), [Astrid M. Veronig](#), [Manuela Temmer](#), [Christian Möstl](#), [Ute V. Amerstorfer](#), [Charles J. Farrugia](#), [Antoinette B. Galvin](#)

ApJ 2019

<https://arxiv.org/pdf/1904.08266.pdf>

[sci-hub.se/10.3847/1538-4357/ab190a](https://doi.org/10.3847/1538-4357/ab190a)

9 Jan

Unveiling the Potential of Deep Learning Models for Solar Flare Prediction in Near-Limb Regions

[Chetraj Pandey](#), [Rafal A. Angryk](#), [Berkay Aydin](#)

the 22nd International Conference on Machine Learning and Applications (ICMLA), 2023

<https://arxiv.org/pdf/2309.14483.pdf>

13 Jan, ~08:40 – Хороший пример динамического спектра ИЗМИРАН с всплесками III плюс четкий гармонический II тип с расщеплением.

http://www.izmiran.ru/stp/lars/MoreSp/130113/big_bw.gif

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

<https://arxiv.org/pdf/2401.16101.pdf>

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>

13-15 Jan

Prompt Enhancements of Radiation Belt Electrons over a Wide Energy Range Based on Phase Space Density Variations: A Detailed Case Study

Xiaoyu [Wang](#)¹, Xing Cao¹, Xudong Gu¹, Binbin Ni^{1,2}, Xin Ma¹, Taorong Luo¹, and Deyu Guo¹

2023 ApJ 942 30

<https://iopscience.iop.org/article/10.3847/1538-4357/aca4c7/pdf>

14 Jan

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>

15 Jan

Large-Scale Solar Magnetic Fields Observed with the Infrared Spectro-Polarimeter IRmag at the National Astronomical Observatory of Japan: Comparison of Measurements Made in Different Spectral Lines and Observatories

M. L. **Demidov**, **Y. Hanaoka**, **T. Sakurai** & **X. F. Wang**

Solar Physics volume 295, Article number: 54 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01620-4.pdf>

A SOLAR CORONAL JET EVENT TRIGGERS A CORONAL MASS EJECTION

Jiajia **Liu**, Yuming Wang, Chenglong Shen, Kai Liu, Zonghao Pan, and S. Wang

2015 *ApJ* 813 115

<http://arxiv.org/pdf/1511.06110v1.pdf>

16 Jan 2013 - A filament eruption near the southwest limb was recorded as a long duration C2.2 event peaking at 19:23 UTC. This event was associated with a minor increase in **proton flux** levels.

16-18 Jan

Full-Sun observations for identifying the source of the slow solar wind

David H. **Brooks**, Ignacio Ugarte-Urra, Harry P. Warren

Nature Communications, 6, 5947 2015

<http://www.nature.com/ncomms/2015/150106/ncomms6947/pdf/ncomms6947.pdf>

17-19 Jan

JETS, CORONAL "PUFFS," AND A SLOW CORONAL MASS EJECTION CAUSED BY AN OPPOSITE-POLARITY REGION WITHIN AN ACTIVE REGION FOOTPOINT

N. **Alzate** and H. Morgan

2016 *ApJ* 823 129

Coronal "Puffs": fast and slow ejections caused by active region jets

Nathalia **Alzate** & Huw Morgan

UKSP Nugget #52, Oct 2014

<http://www.uksolphys.org/uksp-nugget/52-coronal-puffs-fast-and-slow-ejections-caused-by-active-region-jets/>

18 Jan

An Estimate of the Magnetic Field Strength Associated with a Solar Coronal Mass Ejection from Low Frequency Radio Observations

K. Sasikumar **Raja**¹, R. Ramesh¹, K. Hariharan¹, C. Kathiravan¹, and T. J. Wang

2014 *ApJ* 796 56

<https://arxiv.org/pdf/1611.05249v1.pdf>

19 Jan

Hot coronal loops associated with umbral brightenings*

C. E. Alissandrakis and S. Patsourakos

A&A 556, A79 (2013)

20 Jan

Dynamics and connectivity of an extended arch filament system

Andrea [Diercke](#), [Christoph Kuckein](#), [Carsten Denker](#)

A&A 2019

<https://arxiv.org/pdf/1908.01510.pdf>

21 Jan

Motion magnification in coronal seismology

Sergey [Anfinogentov](#), Valery M. Nakariakov

Solar Phys. 2016

<https://arxiv.org/pdf/1611.01790v1.pdf>

21 Jan

Novel data analysis techniques in coronal seismology

Review

[Sergey A. Anfinogentov](#), [Patrick Antolin](#), [Andrew R. Inglis](#), [Dmitrii Kolotkov](#), [Elena G. Kupriyanova](#), [James A. McLaughlin](#), [Giuseppe Nisticò](#), [David J. Pascoe](#), [S. Krishna Prasad](#), [Ding Yuan](#)

2022

<https://arxiv.org/pdf/2112.13577.pdf>

21-22 Jan

3D Reconstruction of Coronal Loops by the Principal Component Analysis

Giuseppe [Nisticò](#), Erwin Verwichte, Valery M. Nakariakov

E-print, Oct 2013; *Entropy*

22 Jan

Resonant absorption as a damping mechanism for the transverse oscillations of the coronal loops observed by SDO/AIA

Javad [Ganjali](#), [Nastaran Farhang](#), [Shahriar Esmaeili](#), [Mohsen Javaherian](#), [Hossein Safari](#)

2019

<https://arxiv.org/pdf/1902.09649.pdf>

Reflection Of Propagating Slow Magneto-acoustic Waves In Hot Coronal Loops : Multi-instrument Observations and Numerical Modelling

Sudip [Mandal](#), Ding Yuan, Xia Fang, Dipankar Banerjee, Vaibhav Pant, Tom Van Doorselaere

ApJ 2016

<http://arxiv.org/pdf/1604.08133v1.pdf>

22-23 Jan

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>

23 Jan

Cross-Calibrating Sunspot Magnetic Field Strength Measurements from the McMath–Pierce Solar Telescope and the Dunn Solar Telescope

Fraser T. [Watson](#), Christian Beck, Matthew J. Penn, Alexandra Tritschler...

Solar Phys. 2015

<http://arxiv.org/pdf/1511.07315v1.pdf>

25 Jan

Segmentation of Coronal Holes Using Active Contours Without Edges

L. E. [Boucheron](#), M. Valluri, R. T. J. McAteer

27 Jan

Reflection Of Propagating Slow Magneto-acoustic Waves In Hot Coronal Loops : Multi-instrument Observations and Numerical Modelling

Sudip **Mandal**, Ding Yuan, Xia Fang, Dipankar Banerjee, Vaibhav Pant, Tom Van Doorselaere
ApJ 2016

<http://arxiv.org/pdf/1604.08133v1.pdf>

Evidence for Hot Fast Flow above a Solar Flare Arcade

S. **Imada**^{1,2}, K. Aoki^{2,3}, H. Hara^{2,3}, T. Watanabe², L. K. Harra⁴, and T. Shimizu
2013 ApJ 776 L11

27 Jan-02 Feb

Quantifying the Consistency and Characterizing the Confidence of Coronal Holes Detected by Active Contours without Edges (ACWE)

Jeremy A. **Grajeda**, [Laura E. Boucheron](#), [Michael S. Kirk](#), [Andrew Leisner](#), [C. Nick Arge](#)
2023

<https://arxiv.org/pdf/2308.05679.pdf>

29 Jan-3 Feb

A Catalog of Interplanetary Coronal Mass Ejections Observed by Juno between 1 and 5.4 AU

Emma E. **Davies** (1,2), [Robert J. Forsyth](#) (2), [Réka M. Winslow](#) (1), [Christian Möstl](#) (3), [Noé Lugaz](#) (1)
2021

<https://arxiv.org/pdf/2111.11336.pdf>

31 Jan

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>

Filament Shape Versus Coronal Potential Magnetic Field Structure

Boris **Filippov**
MNRAS 2015

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

Feb 2013

Evolution of the Magnetic Helicity Flux during the Formation and Eruption of Flux Ropes

P. **Romano**¹, F. P. Zuccarello^{2,3,4}, S. L. Guglielmino⁵, and F. Zuccarello
2014 ApJ 794 118

1-2 Feb

Statistical Study of Solar Dimmings Using CoDiT

Larisa D. **Krista**^{1,2} and Alysha A. Reinard^{1,3}
2017 ApJ 839 50
<http://iopscience.iop.org/sci-hub.cc/0004-637X/839/1/50/>

New Vacuum Solar Telescope observations of a flux rope tracked by a filament activation
Shuhong **Yang**, Jun Zhang, Zhong Liu, Yongyuan Xiang
2014
<http://arxiv.org/pdf/1403.0714v1.pdf>

2 Mar

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

<https://arxiv.org/pdf/2401.16101.pdf>

4 Feb

Cross-Calibrating Sunspot Magnetic Field Strength Measurements from the McMath–Pierce Solar Telescope and the Dunn Solar Telescope

Fraser T. **Watson**, Christian Beck, Matthew J. Penn, Alexandra Tritschler...
Solar Phys. 2015

<http://arxiv.org/pdf/1511.07315v1.pdf>

5 Feb

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>

6 Feb 2013, morning - AR1667 erupted, producing a double-peaked C9-class solar flare that lasted more than ten hours from beginning to end. **Большие темные эрупции на 304 и 193 A.**

See: https://igam02ws.uni-graz.at/mediawiki/index.php?title=Main_Page:Event_Studies

Feb 6, 2013 (C8.7)

Magnetosheath jet occurrence rate in relation to CMEs and SIRs

Florian **Koller**, Manuela Temmer, Luis Preisser, Ferdinand Plaschke, Paul Geyer, Lan K Jian, Owen Wyn Roberts, Heli Hietala, Adrian T. LaMoury

JGR **Volume127, Issue4** e2021JA030124 2022

<https://www.essoar.org/doi/abs/10.1002/essoar.10508761.2>

<https://doi.org/10.1029/2021JA030124>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2021JA030124>

Properties of Streamer Wave Events Observed During the STEREO Era

Bieke **Decraemer**, [Andrei N. Zhukov](#), [Tom Van Doorselaere](#)

ApJ 2020

<https://arxiv.org/pdf/2003.12350.pdf>

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>

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>

Negative bursts

Grechnev et al., PASJ, 2013

9 Feb 2013 - around 0640 UT, C2.4 LDE, a magnetic **filament** in the sun's northern hemisphere **erupted**, hurling a coronal mass ejection (CME) toward Earth.

11 Feb

Finding the critical decay index in solar prominence eruptions

N. **Vasantharaju**, **P. Vemareddy**, **B. Ravindra**, **V. H. Doddamani**

ApJ **2019**

<https://arxiv.org/pdf/1909.10442.pdf>

13 Feb - During the early hours, a magnetic filament erupted near the sun's SW limb.

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

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>

14-15 Feb

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>

15 Feb

Magnetosheath jet occurrence rate in relation to CMEs and SIRs

Florian **Koller**, Manuela Temmer, Luis Preisser, Ferdinand Plaschke, Paul Geyer, Lan K Jian, Owen Wyn Roberts, Heli Hietala, Adrian T. LaMoury

JGR **Volume127, Issue4** e2021JA030124 **2022**

<https://www.essoar.org/doi/abs/10.1002/essoar.10508761.2>

<https://doi.org/10.1029/2021JA030124>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2021JA030124>

16 Feb

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

17 Feb - New sunspot AR1675 has just unleashed the most intense **impulsive** flare of the year so far, an M1.9-class explosion

Inferring the magnetic field asymmetry of solar flares from the degree of polarisation at millimetre wavelengths

Douglas F. da **Silva**, **Paulo J. A. Simões**, **R. F. Hidalgo Ramírez**, **Adriana Válio**

Solar Phys. **2020**

<https://arxiv.org/pdf/2005.01420.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>

The 17 February 2013 sunquake in the context of the active region's magnetic field configuration

Lucie M. [Green](#), [Gherardo Valori](#), [Francesco P. Zuccarello](#), [Sergei Zharkov](#), [Sarah Matthews](#), [Salvo L. Guglielmino](#)

2017 ApJ 849 40

<https://arxiv.org/pdf/1709.04874.pdf>

Millimeter Observation of Solar Flares with Polarization

[Silva](#), D. F.; Valio, A. B. M.

Ground-based Solar Observations in the Space Instrumentation Era

ASP Conference Series, Vol. 504, p. 55, 2016

<http://aspbooks.org/publications/504/055.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>

Energy Release and Initiation of Sunquake in C-class Flare

I.N. [Sharykin](#), A.G. Kosovichev, I.V. Zimovets

2014

<http://arxiv.org/pdf/1405.5912v1.pdf>

18 Feb

Quantifying the Consistency and Characterizing the Confidence of Coronal Holes Detected by Active Contours without Edges (ACWE)

Jeremy A. [Grajeda](#), [Laura E. Boucheron](#), [Michael S. Kirk](#), [Andrew Leisner](#), [C. Nick Arge](#)

2023

<https://arxiv.org/pdf/2308.05679.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>

18-19 Feb

Analysis of the flux growth rate in emerging active regions on the Sun

V.I. [Abramenko](#), A.S. Kutsenko, O.I. Tikhonova, V.B. Yurchyshyn

Solar Phys. 2017

<https://arxiv.org/pdf/1703.00739.pdf>

February 19: The long duration C2 event in AR 11678 (and a filament eruption) caused a CME which was mostly directed towards the north. However, weak components which may be Earth directed were visible in STEREO imagery.

Несколько эрупцій. В том числі більшого южного волокна, см. [304 A](#)

20 Feb

A Catalog of Interplanetary Coronal Mass Ejections Observed by Juno between 1 and 5.4 AU

Emma E. **Davies** (1,2), [Robert J. Forsyth](#) (2), [Réka M. Winslow](#) (1), [Christian Möstl](#) (3), [Noé Lugaz](#) (1)
2021

<https://arxiv.org/pdf/2111.11336.pdf>

23-28 Feb

Homologous Cyclones in the Quiet Sun

Xinting **Yu**^{1,2}, Jun Zhang¹, Ting Li¹, Yuzong Zhang¹, and Shuhong Yang

2014 ApJ 782 L15

25 Feb – очень длительная В8.9 LDE, эрупция и большой CME из-за восточного лимба

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>

25 Feb – 21 Feb

Segmentation of Coronal Holes Using Active Contours Without Edges

L. E. **Boucheron**, M. Valluri, R. T. J. McAteer

Solar Phys. **2016**

25-28 Feb

Analysis of the flux growth rate in emerging active regions on the Sun

V.I. **Abramenko**, A.S. Kutsenko, O.I. Tikhonova, V.B. Yurchyshyn

Solar Phys. **2017**

<https://arxiv.org/pdf/1703.00739.pdf>

26-27 Feb

2D and 3D Analysis of a Torus-unstable Quiet-Sun Prominence Eruption

T. **Rees-Crockford**¹, D. S. Bloomfield¹, E. Scullion¹, and S.-H. Park²

2020 ApJ 897 35

<https://iopscience.iop.org/article/10.3847/1538-4357/ab92a0/pdf>

27 Feb

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>

Acceleration and Expansion of a Coronal Mass Ejection in the High Corona: Role of Magnetic Reconnection

[Bin Zhuang](#), [Noé Lugaz](#), [Manuela Temmer](#), [Tingyu Gou](#), [Nada Al-Haddad](#)

ApJ **2022**

<https://arxiv.org/pdf/2206.02090.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>

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>

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>

28 Feb

Solar and Heliospheric Physics with the Square Kilometre Array with Review

Valery M. [Nakariakov](#), Mario M. Bisi, Philippa K. Browning, Dalmiro Maia, Eduard P. Kontar, Divya Oberoi, Peter T. Gallagher, Iver H. Cairns, Heather Ratcliffe
Proc. Of Science 2015
E-print, Dec 2014

LOFAR tied-array imaging of Type III solar radio bursts

D. E. [Morosan](#), P. T. Gallagher, P. Zucca, R. Fallows, E. P. Carley, G. Mann, et al.
2014
<http://arxiv.org/pdf/1407.4385v1.pdf>

1 Mar

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>

2 March

Two Episodes of a Filament Eruption from a Fan-spine Magnetic Configuration

Jiayan [Yang](#)^{1,2}, Junchao Hong^{1,2}, Haidong Li^{1,2}, and Yunchun Jiang^{1,2}
2020 ApJ 900 158
<https://doi.org/10.3847/1538-4357/aba7c0>

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

3 March

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>

4 March

Solar cycle dependence of Wind/EPACT protons, solar flares and coronal mass ejections

[Miteva](#), R. 1 , Samwel, S. W. 2 , Costa-Duarte, M. V. 3 , Malandraki, O. E. 4

Sun and Geosphere, 2017; 12/1: 11 -19
http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG_v12_No1_2017-pp-11-19.pdf

5 March - 08:01, M1.2, пересвет, STREO-A $A=13*2/313 = 0.08$

5 March, ~07:50 – Очень импульсная M1.2 вспышка со II типом; наше время

The Crucial Role of Perpendicular Diffusion in the Longitude Distribution of >10 MeV Solar Energetic Protons

Yang Wang^{1,2} and Gang Qin^{1,2}

2023 ApJ 954 81

<https://iopscience.iop.org/article/10.3847/1538-4357/ace35b/pdf> File

Examining the Source Regions of Solar Energetic Particles Using an AI-generated Synchronic Potential Field Source Surface Model

Jinhye Park¹, Hyun-Jin Jeong¹, and Yong-Jae Moon^{1,2}

2023 ApJ 953 159

<https://iopscience.iop.org/article/10.3847/1538-4357/acdd00/pdf>

The application of heliospheric imaging to space weather operations: Lessons learned from published studies **Review**

Richard A. Harrison, Jackie A. Davies, Doug Biesecker, Mark Gibbs

Space Weather Volume 15, Issue 8 August 2017 Pages 985–1003

<http://onlinelibrary.wiley.com/doi/10.1002/2017SW001633/full>

Comparison of the CME-shock Acceleration of Three Widespread SEP Events during Solar Cycle 24†

H. Xie, P. Mäkelä, O. C. St. Cyr, N. Gopalswamy

JGR 2017 DOI: 10.1002/2017JA024218

<http://onlinelibrary.wiley.com/doi/10.1002/2017JA024218/pdf>

First Simultaneous Views of the Axial and Lateral Perspectives of a Coronal Mass Ejection

I. Cabello, H. Cremades, L. Balmaceda, I. Dohmen

Solar Phys. 2016 File

Statistical survey of widely spread out solar electron events observed with STEREO and ACE with special attention to anisotropies

N. Dresing, R. Gómez-Herrero, B. Heber, A. Klassen, O. Malandraki, W. Dröge, and Y. Kartavykh

E-print, July 2014; A&A, Volume 567, A27, July 2014; File

5-18 March

Modeling solar energetic particle events using ENLIL heliosphere simulations

J. G. Luhmann, M. L. Mays, D. Odstrčil, Yan Li, H. Bain, C. O. Lee, A. B. Galvin, R. A. Mewaldt, C. M. S. Cohen, R. A. Leske, et al

Space Weather Volume 15, Issue 7 July 2017 Pages 934–954

<http://sci-hub.cc/10.1002/2017SW001617>

6 March

Wave Damping Observed in Upwardly Propagating Sausage-mode Oscillations contained within a Magnetic Pore

S.D.T. Grant, D.B. Jess, M.G. Moreels, R.J. Morton, D.J. Christian, I. Giagkiozis, G. Verth, V. Fedun, P.H. Keys, T. Van Doorselaere, R. Erdelyi

ApJ 2015

<http://arxiv.org/pdf/1505.01484v1.pdf>

11 March

An Estimate of the Magnetic Field Strength Associated with a Solar Coronal Mass Ejection from Low Frequency Radio Observations

K. Sasikumar [Raja](#)¹, R. Ramesh¹, K. Hariharan¹, C. Kathiravan¹, and T. J. Wang

2014 ApJ 796 56

<https://arxiv.org/pdf/1611.05249v1.pdf>

12 March - A magnetic filament northern hemisphere erupted around 1107 UT. C2 LDE.

Приличная северо-центральная эрупция, 304 A; CME направлен, в основном, на север.

STEREO-B image hints at the possibility of an Earth directed CME in association with the C1 LDE near AR 11696 late in the day.

12-22 Mar 2013

Extrapolation of Three Dimensional Magnetic Field Structure in Flare-Productive Active Regions with Different Initial Condition

Y. [Kawabata](#), [S. Inoue](#), [T. Shimizu](#)

ApJ 2020

<https://arxiv.org/pdf/2005.00177.pdf>

13 March - A CME was observed off the east limbs early in the day following a filament eruption near ARs 11696 and 11692 late on March 12. C1.8 LDE.

The relationship between the 5-min oscillation and 3-min oscillations at the umbral/penumbral sunspot boundary

Xinping [Zhou](#), Hongfei Liang

[Astrophysics and Space Science](#) March 2017, 362:46

14 March

How eruptions of a small filament feed materials to a nearby larger-scaled filament

[Hengyuan Wei](#), [Zhenghua Huang](#), [Zhenyong Hou](#), [Youqian Qi](#), [Hui Fu](#), [Bo Li](#), [Lidong Xia](#)

MNRAS:Letter 2020

<https://arxiv.org/pdf/2007.12301.pdf>

Recurrent Two-Sided Loop Jets Caused by Magnetic Reconnection between Erupting Minifilaments and Nearby Large Filament

Bo [Yang](#), [Jiayan Yang](#), [Yi Bi](#), [Zhe Xu](#), [Junchao Hong](#), [Haidong Li](#), [Hechao Chen](#)

ApJ 2019

<https://arxiv.org/pdf/1911.02251.pdf>

15 March, 06:58 ~A magnetic filament snaking around sunspot AR1692 erupted; very long M1.1 LDE; A symmetrical full halo CME was observed and will likely reach Earth on March 17. Слабые мягкие протоны в течение 2-ух дней.

https://igam02ws.uni-graz.at/mediawiki/index.php?title=Main_Page:Event_Studies

http://figshare.com/articles/The_March_15_Solar_Eruption_and_St_Patrick_s_Day_March_17_Geomagnetic_Storm/656804

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>

Magnetic reconnection between loops accelerated by nearby filament eruption

[Leping Li](#), [Hardi Peter](#), [Lakshmi Pradeep Chitta](#), [Hongqiang Song](#), [Kaifan Ji](#), [Yongyuan Xiang](#)

ApJ 2020

<https://arxiv.org/pdf/2012.08710>

Predicting the Time-of-Arrival of Coronal Mass Ejections at Earth From Heliospheric Imaging Observations

Carlos Roberto [Braga](#), [Angelos Vourlidis](#), [Guillermo Stenborg](#), [Alisson Dal Lago](#), [Rafael Rodrigues Souza de Mendonça](#), [Ezequiel Echer](#)

JGR 2020

<https://arxiv.org/pdf/2008.09005.pdf>

Extrapolation of Three-dimensional Magnetic Field Structure in Flare-productive Active Regions with Different Initial Conditions

Y. [Kawabata](#)¹, S. Inoue², and T. Shimizu^{3,4}

2020 ApJ 895 105

<https://sci-hub.tw/https://iopscience.iop.org/article/10.3847/1538-4357/ab8ea9>

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

Nishtha [Sachdeva](#)

Ph.D. [Thesis](#) 2019

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

A Sun-to-Earth analysis of magnetic helicity of the 17-18 March 2013 interplanetary coronal mass ejection

Sanchita [Pal](#), [Nat Gopalswamy](#), [Dibyendu Nandy](#), [Sachiko Akiyama](#), [Seiji Yashiro](#), [Pertti Makela](#), [Hong Xie](#)

2017

<https://arxiv.org/pdf/1712.01114.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>

Simultaneous longitudinal and transverse oscillation in an active filament

V. [Pant](#), R. Mazumder, D. Yuan, D. Banerjee, A. K. Srivastava, Y. Shen

Solar Phys. 2016

<https://arxiv.org/pdf/1611.03984v1.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>

Global magnetohydrodynamic simulation of the 15 March 2013 coronal mass ejection event—Interpretation of the 30–80 MeV proton flux

Chin-Chun [Wu](#), Kan Liou, Angelos Vourlidas, Simon Plunkett, Murray Dryer, S. T. Wu, Richard A. Mewaldt
JGR Volume 121, Issue 1 January 2016 Pages 56–76

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/13-7784-00-00-00-14-46-02/Park.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>

MHD Seismology of a loop-like filament tube by observed kink waves

V. [Pant](#), A.K. Srivastava, D. Banerjee, M. Goossens, P.F. Chen, N.C. Joshi, Y.H. Zhou
RAA, 2015

<http://arxiv.org/pdf/1503.02281v1.pdf>

An Estimate of the Magnetic Field Strength Associated with a Solar Coronal Mass Ejection from Low Frequency Radio Observations

K. Sasikumar [Raja](#)¹, R. Ramesh¹, K. Hariharan¹, C. Kathiravan¹, and T. J. Wang
2014 ApJ 796 56

15-17 March

Advancing interplanetary magnetohydrodynamic models through solar energetic particle modelling

Insights from the 2013 March 15 SEP event*

A. [Niemela](#)^{1,2}, N. Wijsen^{3,4}, A. Aran^{5,6}, L. Rodriguez², J. Magdalenic^{1,2} and S. Poedts^{1,7}
A&A 679, A93 (2023)

<https://www.aanda.org/articles/aa/pdf/2023/11/aa47116-23.pdf>

Challenges in Specifying and Predicting Space Weather

[R. W. Schunk](#), [L. Scherliess](#), [V. Eccles](#), [L. C. Gardner](#), [J. J. Sojka](#), [L. Zhu](#), [X. Pi](#), [A. J. Mannucci](#), [A. Komjathy](#), [C. Wang](#), [G. Rosen](#)

Space Weather e2019SW002404 2020

<https://doi.org/10.1029/2019SW002404>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2019SW002404>

Benchmarking CME Arrival Time and Impact: Progress on Metadata, Metrics, and Events

C. [Verbeke](#), [M. L. Mays](#), [M. Temmer](#), [S. Bingham](#), [R. Steenburgh](#), [M. Dumbović](#), [M. Núñez](#), [L.K. Jian](#), [P. Hess](#), [C. Wiegand](#), [A. Taktakishvili](#), [J. Andries](#)

Space Weather special issue: Space Weather Capabilities Assessment 2018

<https://arxiv.org/pdf/1811.10695.pdf>

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](#)

[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

16 March

Filament Eruption Driving EUV Loop Contraction then Expansion above a Stable Filament

[Ramesh Chandra](#), [Pascal Demoulin](#), [Pooja Devi](#), [Reetika Joshi](#), [Brigitte Schmieder](#)

ApJ 2021

<https://arxiv.org/pdf/2109.07821.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>

Finding the critical decay index in solar prominence eruptions

N. [Vasantharaju](#), [P. Vemareddy](#), [B. Ravindra](#), [V. H. Doddamani](#)

ApJ 2019

<https://arxiv.org/pdf/1909.10442.pdf>

16-19 Mar

Thermosphere modeling capabilities assessment: geomagnetic storms

Sean [Bruinsma](#)^{1*}, Claude Boniface¹, Eric K. Sutton² and Mariangel Fedrizzi³

J. Space Weather Space Clim. 2021, 11, 12

<https://www.swsc-journal.org/articles/swsc/pdf/2021/01/swsc200061.pdf>

17 March –A halo CME was observed in LASCO imagery late in the day. STEREO-A displays a CME starting at 15:54 UTC with the major part of the ejection occurring a few hours later (when it was observed in STEREO-B as well). **SDO imagery displays a complex sequence of events involving large parts of the visible northern hemisphere. The most significant event was a filament eruption in the SE quadrant starting near 16:43 UTC, 304 A .**

As predicted, a coronal mass ejection (CME) hit Earth's magnetic field at 0600 UT on March 17th. The impact lifted the solar wind speed from 300 km/s to 700 km/s and sparked a moderately strong (Kp=6) **geomagnetic storm of Dst~132 nT .**

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

Forbush Decreases during the DeepMin and MiniMax of Solar Cycle 24

[Lingri, D.](#); [Mavromichalaki, H.](#); [Belov, A.](#); [Eroshenko, E.](#); [Yanke, V.](#); [Abunin, A.](#); [Abunina, M.](#)

XXV ECRS 2016 Proceedings

<https://arxiv.org/pdf/1612.08900.pdf>

Space Weather Effects in the Earth's Radiation Belts

Review

D. N. [Baker](#), P. J. Erickson, J. F. Fennell, J. C. Foster, A. N. Jaynes, P. T. Verronen

[Space Science Reviews](#) February 2018, 214:17

<https://link.springer.com/content/pdf/10.1007%2Fs11214-017-0452-7.pdf>

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

17-18 March

A Sun-to-Earth analysis of magnetic helicity of the 17-18 March 2013 interplanetary coronal mass ejection

Sanchita [Pal](#), [Nat Gopalswamy](#), [Dibyendu Nandy](#), [Sachiko Akiyama](#), [Seiji Yashiro](#), [Pertti Makela](#), [Hong Xie](#)

2017

<https://arxiv.org/pdf/1712.01114.pdf>

21 March - 22:16, M1.6 пересвет $A=24*2/313 = 0.15 \leftarrow 16s \ 8s \rightarrow$ **22:11** $A=13*2/313 = 0.083$

21 March

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>

23 March

Collective Study of Polar Crown Filaments in the Past Four Solar Cycles

Yan [Xu](#), Werner Potzi, Hewei Zhang, Nengyi Huang, Ju Jing, and Haimin Wang

2018

<https://arxiv.org/pdf/1807.11844.pdf>

28 March

First Simultaneous Views of the Axial and Lateral Perspectives of a Coronal Mass Ejection

I. [Cabello](#), H. Cremades, L. Balmaceda, I. Dohmen

Solar Phys. 2016

File

29 March – геомагнитная буря от КД, Dst~-57 нТл

30 March

Imaging and Spectroscopic Observations of a Transient Coronal Loop: Evidence for the Non-Maxwellian κ -Distributions

Jaroslav [Dudik](#), Simon Mackovjak, Elena Dzifcakova, [Giulio Del Zanna](#), [David R. Williams](#), [Marian Karlicky](#), [Helen E. Mason](#), [Juraj Lorincik](#), [Pavel Kotrc](#), [Frantisek Farnik](#), [Alena Zemanova](#)

ApJ 2015

<http://arxiv.org/pdf/1505.04333v1.pdf>

1 April - a magnetic filament snaking some 800,000 km around the sun's north pole rose up and erupted, hurling part of itself into space.

1-4 Apr

The evolution of arch filament systems and moving magnetic features around a sunspot★

Li [Ma](#)^{1,2}, Wangping Zhou^{1,2}, Guiping Zhou² and Jun Zhang

A&A 583, A110 (2015)

5 Apr - 18:16, M2.2, пересвет, STREO-B $B=39*2/293 = 0.27 \leftarrow 16s \ 8s \rightarrow B=39/293 = 0.133$

5 Apr

Correcting Projection Effects in CMEs using GCS-based Large Statistics of Multi-viewpoint Observations

[Harshita Gandhi](#), [Ritesh Patel](#), [Vaibhav Pant](#), [Satabdwa Majumdar](#), [Sanchita Pal](#), [Dipankar Banerjee](#), [Huw Morgan](#)

Space weather 2024

<https://arxiv.org/pdf/2402.07961.pdf>

6 Apr

Probing the Sunspot Atmosphere with Three-Minute Oscillations

A.S. [Deres](#), [S.A. Anfinogentov](#)

[Solar Physics](#) January 2018, 293:2

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1222-0.pdf>

<https://arxiv.org/pdf/1710.11552.pdf>

Peculiarity of the oscillation stratification in sunspot penumbrae

D.Y. [Kolobov](#), A.A. Chelpanov, N.I. Kobanov

2016

<http://arxiv.org/pdf/1607.06175v1.pdf>

Behaviour of oscillations in loop structures above active regions

D.Y. [Kolobov](#), N.I. Kobanov, A.A. Chelpanov, A.A. Kochanov, S.A. Anfinogentov, S.A. Chupin, I.I. Myshyakov, V.E. Tomin

Advances in Space Research Volume 56, Issue 12, 15 December 2015, Pages 2760–2768

<http://www.sciencedirect.com/science/article/pii/S0273117715003403>

<http://arxiv.org/pdf/1505.02857v1.pdf>

7-18 Apr

Modeling solar energetic particle events using ENLIL heliosphere simulations

J. G. [Luhmann](#), M. L. Mays, D. Odstrcil, Yan Li, H. Bain, C. O. Lee, A. B. Galvin, R. A. Mewaldt, C. M. S. Cohen, R. A. Leske, et al

Space Weather Volume 15, Issue 7 July 2017 Pages 934–954

<http://sci-hub.cc/10.1002/2017SW001617>

8 Apr

Supervised convolutional neural networks for classification of flaring and nonflaring active regions using line-of-sight magnetograms

[Shamik Bhattacharjee](#), [Rasha Alshehhi](#), [Dattaraj B. Dhuri](#), [Shravan M. Hanasoge](#)

ApJ 2020

<https://arxiv.org/pdf/2005.13333.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>

9 Apr

An upgrade of the UTR-2 radio telescope to a multifrequency radio heliograph

[Stanislavsky](#) A., Konovalenko A., Koval A., Volvach Ya.

SUN and GEOSPHERE Vol.13, No.1 - 2018 p. 21-24

http://newserver.stil.bas.bg/SUNGEO/00SGArhiv/SG_v13_No1_2018-pp-21-24.pdf

10 Apr

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>

10-11 Apr

How Rotating Solar Atmospheric Jets Become Kelvin--Helmholtz Unstable

Ivan [Zhelyazkov](#), [Ramesh Chandra](#), [Reetika Joshi](#)

Frontiers (of Physics) 2019

<https://arxiv.org/pdf/1905.10789.pdf>

High mode magnetohydrodynamic waves propagation in a twisted rotating jet emerging from a filament eruption

[Ivan Zhelyazkov](#), [Ramesh Chandra](#)

MNRAS 2018

<https://arxiv.org/pdf/1805.07536.pdf>

On the Observation and Simulation of Solar Coronal Twin Jets

Jiajia [Liu](#), Fang Fang, Yuming Wang, [Scott W. McIntosh](#), [Yuhong Fan](#), [Quanhao Zhang](#)

2016

<http://arxiv.org/pdf/1608.07759v1.pdf>

Formation of a rotating jet during the filament eruption on 10-11 April 2013

B. [Filippov](#), A. K. Srivastava, B. N. Dwivedi, S. Masson, G. Aulanier, N. C. Joshi, W. Uddin

MNRAS 2015

<http://arxiv.org/pdf/1505.01615v1.pdf>

11 April, 07:16 - M6.5/3B LDE, N09E12. Large Coronal Wave and dimmings. **Sustained Gamma**-This event was associated with a wide, fast full halo CME and a significant increase in proton levels at Earth. Сходство с 15 марта. **Gamma**

A coronal mass ejection (CME) swept past Earth on April 13th around 22:55 UT северной Вз. Поэтому бури не было, но был приличный **форбуш**.

https://igam02ws.uni-graz.at/mediawiki/index.php?title=Main_Page:Event_Studies

Studying the spheromak rotation in data-constrained CME modelling with EUHFORIA and assessing its effect on the Bz prediction

Ranadeep [Sarkar](#), [Jens Pomoell](#), [Emilia Kilpua](#), [Eleanna Asvestari](#), [Nicolas Wijsen](#), [Anwasha Maharana](#), [Stefaan Poedts](#)

ApJS 2023

<https://arxiv.org/pdf/2311.15616.pdf>

Measuring local physical parameters in coronal loops with spatial seismology

G. Y. [Chen](#)¹, Y. Guo¹, M. D. Ding¹ and R. Erdélyi^{2,3,4}

A&A 678, A205 (2023)

<https://www.aanda.org/articles/aa/pdf/2023/10/aa46393-23.pdf>

Onset and evolution of solar flares: Application of 2D and 3D models of magnetic reconnection

Bhuwan [Joshi](#), [Prabir K. Mitra](#), [Astrid M. Veronig](#), [R. Bhattacharyya](#)

the 3rd BINA workshop, to be published in the Bulletin of the Liège Royal Society of Sciences 2023

<https://arxiv.org/pdf/2310.00366.pdf>

Effects of supra-arcade downflows interacting with the post-flare arcade

[Arun Kumar Awasthi](#), [Rui Liu](#), [Tingyu Gou](#)

ApJ 2022

<https://arxiv.org/pdf/2211.08592.pdf>

Sigmoid Formation Through Slippage of A Single J-shaped Coronal Loop

[Hanya Pan](#), [Tingyu Gou](#), [Rui Liu](#)

ApJ 2022

<https://arxiv.org/pdf/2208.14034.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>

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>

Assessing the Influence of Input Magnetic Maps on Global Modeling of the Solar Wind and CME-driven Shock in the 2013 April 11 Event

Meng [Jin](#), [Nariaki V. Nitta](#), [Christina M. S. Cohen](#)

Space Weather 2022

<https://arxiv.org/pdf/2202.07214.pdf>

Magnetic imprints of eruptive and non-eruptive Solar flares as observed by Solar Dynamics Observatory

[N. Vasantharaju](#), [P. Vemareddy](#), [B. Ravindra](#), [V. H. Doddamani](#)

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24 Apr 24d – буря, Dst~-52 nT

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 First AGILE Solar Flare Catalog

[Alessandro Ursi](#), [Nicolò Parmiggiani](#), [Mauro Messerotti](#), [Alberto Pellizzoni](#), [Carlotta Pittori](#), [Francesco Longo](#), [Francesco Verrecchia](#), [Andrea Argan](#), [Andrea Bulgarelli](#), [Marco Tavani](#), [Patrizio Tempesta](#), [Fabio D'Amico](#)

ApJ 2023

<https://arxiv.org/pdf/2305.14957.pdf>

Statistical study of hard X-ray emitting electrons associated with flare-related coronal jets

Sophie **Musset**, [Mariana Jeunon](#), [Lindsay Glesener](#)

2020 ApJ 889 183

<https://arxiv.org/pdf/1903.10414.pdf>

[sci-hub.si/10.3847/1538-4357/ab6222](https://arxiv.org/pdf/1903.10414.pdf)

24-25 April – слабые жесткие протоны

28 Apr

Cause and Kinematics of a Jet-Like CME

[Reetika Joshi](#), [Yuming Wang](#), [Ramesh Chandra](#), [Quanhao Zhang](#), [Lijuan Liu](#), [Xiaolei Li](#)

ApJ 2020

<https://arxiv.org/pdf/2008.05651.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

30 Apr

Further Evidence for Looplike Fine Structure inside "Unipolar" Active Region Plages

[Y.-M. Wang](#), [I. Ugarte-Urra](#), [J. W. Reep](#)

The Astrophysical Journal, 885, 34 (2019)

<https://arxiv.org/ftp/arxiv/papers/2104/2104.06633.pdf>

Further Evidence for Looplike Fine Structure inside "Unipolar" Active Region Plages

Y.-M. **Wang**, I. Ugarte-Urra, and J. W. Reep

2019 ApJ 885 34

[sci-hub.se/10.3847/1538-4357/ab45f6](https://arxiv.org/ftp/arxiv/papers/2104/2104.06633.pdf)

Influence of Non-Potential Coronal Magnetic Topology on Solar-Wind Models

S. J. **Edwards**, A. R. Yeates, F.-X. Bocquet, D.H. Mackay

Solar Phys. 2015

[http://arxiv.org/pdf/1511.00427v1.pdf](https://arxiv.org/pdf/1511.00427v1.pdf)

1 May – утро, ~02:20, крупная эрупция из-за E-лимба, STEREO-B

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>

Multiwavelength Stereoscopic Observation of the 2013 May 1 Solar Flare and CME

Erica [Lastufka](#)^{1,2}, Säm Krucker^{1,3}, Ivan Zimovets⁴, Bulat Nizamov⁵, Stephen White⁶, Satoshi Masuda⁷, Dmitriy Golovin⁴, Maxim Litvak⁴, Igor Mitrofanov⁴, and Anton Sanin⁴

2019 ApJ 886 9

[sci-hub.se/10.3847/1538-4357/ab4a0a](https://arxiv.org/pdf/1805.08401v1.pdf)

1-15 May

Variation of Coronal Activity from the Minimum to Maximum of Solar Cycle 24 using Three Dimensional Coronal Electron Density Reconstructions from STEREO/COR1

Tongjiang [Wang](#), Nelson L. Reginald, Joseph M. Davila, O. Chris St. Cyr, William T. Thompson
Solar Phys. **2017**

<https://arxiv.org/pdf/1706.05116.pdf>

2 May, 05:10 – импульсная M1.1 вспышка

Assessing the spectral characteristics of band splitting type II radio bursts observed by CALLISTO spectrometers

[F. N. Minta](#), [S. Nozawa](#), [K. Kamen](#), [A. Elsaid](#), [A. Ayman](#)

Adv Sp Res. 1-14 (**2022**)

<https://arxiv.org/ftp/arxiv/papers/2301/2301.13839.pdf>

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>

Investigation of two coronal mass ejections from circular ribbon source region: Origin, Sun-Earth propagation and Geo-effectiveness

[Syed Ibrahim](#), [Wahab Uddin](#), [Bhuvan Joshi](#), [Ramesh Chandra](#), [Arun Kumar Awasthi](#)

Research in Astronomy and Astrophysics **2021**

<https://arxiv.org/pdf/2110.06547.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>

3 May – 17:35: M5.7 вспышка, **пересвет** на STEREO-B, $B=40 \cdot 2/298=0,27$

3 May 1730 - a strong M5-class flare. This event was associated with a fast CME off the E- limb.

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>

Quiet Sun H α Transients and Corresponding Small-Scale Transition Region and Coronal Heating

V. M. J. [Henriques](#), D. Kuridze, M. Mathioudakis, F. P. Keenan

ApJ 2016
<http://arxiv.org/pdf/1602.04820v1.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>

Regarding the detectability and measurement of coronal mass ejections **Review**

Timothy A. Howard
J. Space Weather Space Clim., 5, A22 (2015) File
<http://www.swsc-journal.org/articles/swsc/pdf/2015/01/swsc140065.pdf>

4 May

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

4-5 May

Further Evidence for Looplike Fine Structure inside "Unipolar" Active Region Plages
Y.-M. Wang, I. Ugarte-Urra, and J. W. Reep
2019 ApJ 885 34
sci-hub.se/10.3847/1538-4357/ab45f6

5-10 May

Observations of a Hybrid Double-Streamer/Pseudostreamer in the Solar Corona
Rachmeler, L. A., Platten, S. J., Bethge, C. W., Seaton, D. B., Yeates, A. R.
E-print, April 2014; ApJL
<http://arxiv.org/pdf/1312.3153v2.pdf>

10 May – 01:11: M3.9 вспышка, **пересвет** на STEREO-B, $B=25,5^{\circ}2/298=0,17$
13:26: M1.3 вспышка, **пересвет** на STEREO-B, $B=15^{\circ}2^{\circ}2/298=0,1$

10 May – 00:57: **M3.9** вспышка вблизи E-лимба

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>

Plasma Interactions with the Space Environment in the Acceleration Region: Indications of CME-trailing Reconnection Regions

Elizabeth A. Jensen^{1,2}, Carl Heiles³, David Wexler⁴, Amanda A. Kepley⁵, Thomas Kuiper⁶, Mario M. Bisi⁷, Deborah Domingue Lorin¹, Elizabeth V. Kuiper⁸, and Faith Vilas¹,
Astrophysical Journal, 861:118 (12pp), 2018 July 10
<http://sci-hub.tw/http://iopscience.iop.org/0004-637X/861/2/118/>

11 May - >16 UT: крупная эруция **NW** волокна, **304 А**; большая ПЭ аркада видна утром 12-ого

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

12 - ? May – высокая активность; восточная область AR1748 has produced 4 X-овые LDE вспышки: an X1.7-class flare (02:17 UT on May 13), an X2.8-class flare (16:09 UT on May 13), an X3.2-class flare (01:17 UT on May 14), and an X1.2-class flare (01:52 on May 15).

12 May – 20:36: M1.9 вспышка, **пересвет** на STEREO-B, $B=10^2/300=0,07$

22:56: M1.2 вспышка, **пересвет** на STEREO-B, $B=9^2/300=0,06$

12 May – 20:32: **M1.9** вспышка вблизи E-лимба и позже еще M1.2 вспышка

Pitfalls of Periodograms: The Nonstationarity Bias in the Analysis of Quasiperiodic Oscillations

Moritz **Hübner**^{1,2}, Daniela Huppenkothen³, Paul D. Lasky^{1,2}, and Andrew R. Inglis^{4,5}

2022 ApJS 259 32

<https://iopscience.iop.org/article/10.3847/1538-4365/ac49ec/pdf>

Multi-viewpoint Coronal Mass Ejection Catalog Based on STEREO COR2 Observations

Angelos **Vourlidas**^{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>

13 May – 02:16: X1.7 **пересвет** $B=125^2/300=0,83$ $\leftarrow 16s$ $8s \rightarrow B=125/300=0,417$

16:15: X2.8 **пересвет**, $B=172^2/300=1,15$ $\leftarrow 16s$ $8s \rightarrow$ **16:06** $B=143^2/300=0,953$

13 May – 02:17: **X1.7 LDE вспышка** вблизи E-лимба; **S15~2300 sfu**; мощный CME

16:05: X2.8/1N LDE вспышка, N11E85, **S15~5700 sfu**; мощный CME **Gamma**

И еще эрупции на W-лимбе

Towards Interpretable Solar Flare Prediction with Attention-based Deep Neural Networks

Chetraj **Pandey**, Anli Ji, Rafal A. Angryk, Berkay Aydin

The 6th International Conference on Artificial Intelligence and Knowledge Engineering (AIKE), 2023

<https://arxiv.org/pdf/2309.04558.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

Solar Flare-CME Coupling Throughout Two Acceleration Phases of a Fast CME

[Tingyu Gou](#), [Astrid M. Veronig](#), [Rui Liu](#), [Bin Zhuang](#), [Mateja Dumbovic](#), [Tatiana Podladchikova](#), [Hamish A. S. Reid](#), [Manuela Temmer](#), [Karin Dissauer](#), [Bojan Vrsnak](#), [Yuming Wang](#)
ApJ **2020**
<https://arxiv.org/pdf/2006.11707.pdf>

Особенности развития длительных потоков высокоэнергичного гамма-излучения на разных стадиях солнечных вспышек.

[Минасянц Г.С.](#), [Минасянц Т.М.](#), [Томозов В.М.](#)
СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 5. 2019. № 3. С. 11–20
<https://naukaru.ru/ru/storage/view/39748>

The Role of Energy Diffusion in the Deposition of Energetic Electron Energy in Solar and Stellar Flares

Natasha L. S. [Jeffrey](#), [Eduard P. Kontar](#), [Lyndsay Fletcher](#)
ApJ **2019**
<https://arxiv.org/pdf/1906.01887.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. Bazilevskaaya](#), [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

Determination of the total accelerated electron rate and power using solar flare hard X-ray spectra

Eduard P. [Kontar](#), [Natasha L. S. Jeffrey](#), [A. Gordon Emslie](#)
ApJ **2018**
<https://arxiv.org/pdf/1812.09474.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

The Birth of A Coronal Mass Ejection

Tingyu [Gou](#), [Rui Liu](#), [Bernhard Kliem](#), [Yuming Wang](#), [Astrid M. Veronig](#)
Science Advances **2018**
<https://arxiv.org/pdf/1811.04707.pdf>

The Power of Turbulence

Nic [Bian](#)
RHESSI Nuggets #308 September **2017**
http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/The_Power_of_Turbulence

Solar hard X-ray imaging by means of Compressed Sensing and Finite Isotropic Wavelet Transform

M. A. [Duval-Poo](#), [M. Piana](#), [A. M. Massone](#)

A&A 2017
<https://arxiv.org/pdf/1708.03877.pdf>

Direct Observation of Two-Step Magnetic Reconnection in a Solar Flare

Tingyu [Gou](#), [Astrid M. Veronig](#), [Ewan Dickson](#), [Aaron Hernandez-Perez](#), [Rui Liu](#)

ApJ 2017
<https://arxiv.org/pdf/1707.06198.pdf>

Millimeter Observation of Solar Flares with Polarization

[Silva](#), D. F.; Valio, A. B. M.

Ground-based Solar Observations in the Space Instrumentation Era

ASP Conference Series, Vol. 504, p. 55, 2016

<http://aspbooks.org/publications/504/055.pdf>

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

2017 ApJ 838 70
<http://sci-hub.cc/10.3847/1538-4357/aa656f>

Flare Observations

Review

Arnold O. [Benz](#)

[Living Reviews in Solar Physics](#) December 2017?, 14:2 **File**

This article is a revised version of <http://dx.doi.org/10.12942/lrsp-2008-1>.

<https://link.springer.com/content/pdf/10.1007%2Fs41116-016-0004-3.pdf>

INITIATION PROCESSES FOR THE 2013 MAY 13 X1.7 LIMB FLARE

Jinhua [Shen](#)^{1,2}, Ya Wang^{3,4}, Tuanhui Zhou^{3,5}, and Haisheng Ji^{3,5}

2017 ApJ 835 43
<http://iopscience.iop.org/sci-hub.cc/0004-637X/835/1/43/>

Global Energetics of Solar Flares and CMEs: V. Energy Closure

Markus J. [Aschwanden](#), Amir Campi, Christina M.S. Cohen, [Gordon Holman](#), [Ju Jing](#), [Matthieu Kretschmar](#), [Eduard P. Kontar](#), [James McTiernan](#), [Richard A. Mewaldt](#), [Aidan O'Flannagain](#), [Ian G. Richardson](#), [Daniel Ryan](#), [Harry P. Warren](#), [Yan Xu](#)

ApJ 2017

<https://arxiv.org/pdf/1701.01176v1.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>

Eigenmodes of three-dimensional magnetic arcades in the Sun's corona

Bradley W. [Hindman](#), Rekha Jain

2015
<http://arxiv.org/pdf/1511.09411v1.pdf>

High-temperature differential emission measure and altitude variations in the temperature and density of solar flare coronal X-ray sources

Natasha [Jeffrey](#), Eduard Kontar, Brian Dennis

A&A 2015
<http://arxiv.org/pdf/1510.04095v1.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

See presentation

https://community.apan.org/cfs-file.ashx/_key/telligent-evolution-components-attachments/13-7784-00-00-14-46-02/Park.pdf

The collisional relaxation of electrons in hot flaring plasma and inferring the properties of solar flare accelerated electrons from X-ray observations

Natasha **Jeffrey**, [Eduard Kontar](#), [Gordon Emslie](#), [Nicolas Bian](#)

14th Annual International Astrophysics Conference Tampa proceedings, 2015

<http://arxiv.org/pdf/1507.06785v1.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

Above-the-Looptop Sources

Mitsuo **Oka** and Sa"m Krucker.

RHESSI Science Nugget No. 244, Jan 2015

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Above-the-Looptop_Sources

Early Evolution of an Energetic Coronal Mass Ejection and Its Relation to EUV Waves

Rui **Liu**, Yuming Wang, and Chenglong Shen

E-print, Oct 2014 **File**; ApJ, 2014;

<http://arxiv.org/pdf/1410.1960v1.pdf>

HMI observations of linear polarization in a coronal loop prominence system

Pascal **Saint-Hilaire**

HMI Science Nuggets, #10, March 2014

<http://hmi.stanford.edu/hminuggets/?p=591>

HMI as "Coronagraph"?

Juan-Carlos Martínez **Oliveros**

HMI Science Nuggets #9, March 2014

<http://hmi.stanford.edu/hminuggets/?p=560>

Chromospheric and Coronal Observations of Solar Flares with the Helioseismic and Magnetic Imager

Juan-Carlos Martínez **Oliveros**¹, Säm Krucker^{1,2}, Hugh S. Hudson^{1,3}, Pascal Saint-Hilaire¹, Hazel Bain¹, Charles Lindsey⁴, Rick Bogart⁵, Sebastien Couvidat⁵, Phil Scherrer⁵, and Jesper Schou
E-print, Dec 2013, 2014 ApJ 780 L28

Flare Coronal Rain

Hugh **Hudson** and Sa"m Krucker

RHESSI Science Nuggets, No. 216, Dec 2013

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

The Post-Burst Increase

Hugh **Hudson**

RHESSI Nugget, No. 208, Sept 2013

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/The_Post-Burst_Increase

12 May -10 June

Modeling Coronal Response in Decaying Active Regions with Magnetic Flux Transport and Steady Heating

Ignacio [Ugarte-Urra](#), [Harry P. Warren](#), [Lisa A. Upton](#), [Peter R. Young](#)

ApJ 2017

<https://arxiv.org/pdf/1708.04324.pdf>

13 May

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>

Temporal and Spatial Characteristics of Hard X-Ray Sources in Flare Model with a Vertical Current Sheet

[Alexander N. Shabalin](#), [Evgenia P. Ovchinnikova](#), [Yuri E. Charikov](#)

ApJ 2023

<https://arxiv.org/pdf/2308.05718.pdf>

Next-Generation Comprehensive Data-Driven Models of Solar Eruptive Events

[Joel C. Allred](#), [Graham S. Kerr](#), [Meriem Alaoui](#), [Juan Camilo Buitrago-Casas](#), +++

White paper submitted to the Decadal Survey for Solar and Space Physics (Heliophysics) 2024-2033
2023

<https://arxiv.org/pdf/2307.14946.pdf>

Energy-releasing Process for the 2013 May 13 X1.7 Limb Flare: A Continued Study

Jinhua [Shen](#)^{1,2}, Jianping Li³, Yu Huang³, Dong Li³, Yingna Su³, and Haisheng Ji³

2023 ApJ 950 71

<https://iopscience.iop.org/article/10.3847/1538-4357/accc8c/pdf>

Rapid Rotation of an Erupting Prominence and the Associated Coronal Mass Ejection on 13 May 2013

[Yuhao Zhou](#), [Haisheng Ji](#) & [Qingmin Zhang](#)

Solar Physics volume 298, Article number: 35 (2023)

<https://doi.org/10.1007/s11207-023-02126-5>

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>

Rapid Rotation of an Erupting Prominence and the Associated Coronal Mass Ejection on 13 May 2013

[Yuhao Zhou](#), [Haisheng Ji](#), [Qingmin Zhang](#)

Solar Phys. 2023

<https://arxiv.org/pdf/2302.00212.pdf>

13 - >18 May – медленно нарастающие **SPE протоны от восточной активности**
Prolonged gamma

Овчинникова, Чариков Plasma-22

Broken Power-law Energy Spectra of the Accelerated Electrons Detected in Radio and Hard X-Rays during the SOL2013-05-13 Event

Douglas Félix da **Silva**^{1,2} and Adriana Valio²
2021 ApJL 915 L1
<https://doi.org/10.3847/2041-8213/ac0726>

Solar Flare-CME Coupling Throughout Two Acceleration Phases of a Fast CME
[Tingyu Gou](#), [Astrid M. Veronig](#), [Rui Liu](#), [Bin Zhuang](#), [Mateja Dumbovic](#), [Tatiana Podladchikova](#), [Hamish A. S. Reid](#), [Manuela Temmer](#), [Karin Dissauer](#), [Bojan Vrsnak](#), [Yuming Wang](#)
ApJL 2020
<https://arxiv.org/pdf/2006.11707.pdf>

The Birth of A Coronal Mass Ejection
[Tingyu Gou](#), [Rui Liu](#), [Bernhard Kliem](#), [Yuming Wang](#), [Astrid M. Veronig](#)
Science Advances Vol. 5, no. 3, eaau7004 2019 DOI: 10.1126/sciadv.aau7004 File
<https://arxiv.org/pdf/1811.04707.pdf>
<http://advances.sciencemag.org/content/advances/5/3/eaau7004.full.pdf>

Lyman-alpha Variability During Solar Flares Over Solar Cycle 24 Using GOES-15/EUVS-E
[Ryan O. Milligan](#), [Hugh S. Hudson](#), [Phillip C. Chamberlin](#), [Iain G. Hannah](#)
Space Weather 2019
<https://arxiv.org/pdf/1910.01364.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

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. Bazilevskaia](#), [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

Fermi, Wind, and SOHO Observations of Sustained Gamma-Ray Emission from the Sun
[N. Gopalswamy](#), [P. Makela](#), [S. Yashiro](#), [A. Lara](#), [H. Xie](#), [S. Akiyama](#), [R. J. MacDowall](#)
Submitted to 2019 URSI Asia Pacific Radio Science Conference 2018
<https://arxiv.org/ftp/arxiv/papers/1810/1810.08958.pdf>

Solar hard X-ray imaging by means of compressed sensing and finite isotropic wavelet transform
[M. A. Duval-Pool](#)¹, [M. Piana](#)^{1,2} and [A. M. Massone](#)²
A&A 615, A59 (2018)
<https://www.aanda.org/articles/aa/pdf/2018/07/aa31765-17.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

Direct Observation of Two-Step Magnetic Reconnection in a Solar Flare

Tingyu [Gou](#), [Astrid M. Veronig](#), [Ewan Dickson](#), [Aaron Hernandez-Perez](#), [Rui Liu](#)
ApJ 845: L1 2017
<https://arxiv.org/pdf/1707.06198.pdf>

The Power of Turbulence

Nic [Bian](#)

RHESSI Nuggets #308 September 2017

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

Helioseismic and Magnetic Imager observations of linear polarization from a loop prominence system

Pascal [Saint-Hilaire](#), Jesper Schou, Juan-Carlos Martínez Oliveros, Hugh S. Hudson, Säm Krucker, Hazel Bain, Sébastien Couvidat

2014

<http://arxiv.org/pdf/1402.7016v1.pdf>

OBSERVATIONS OF LINEAR POLARIZATION IN A SOLAR CORONAL LOOP PROMINENCE SYSTEM OBSERVED NEAR 6173 Å

Pascal [Saint-Hilaire](#)¹, Jesper Schou², Juan-Carlos Martínez Oliveros¹, Hugh S. Hudson^{1,3}, Säm Krucker^{1,4}, Hazel Bain¹, and Sébastien Couvidat⁵

2014 ApJL 786 L19

<https://iopscience.iop.org/article/10.1088/2041-8205/786/2/L19/pdf>

CHROMOSPHERIC AND CORONAL OBSERVATIONS OF SOLAR FLARES WITH THE HELIOSEISMIC AND MAGNETIC IMAGER

Juan-Carlos Martínez [Oliveros](#)¹, Säm Krucker^{1,2}, Hugh S. Hudson^{1,3}, Pascal Saint-Hilaire¹, Hazel Bain¹, Charles Lindsey⁴, Rick Bogart⁵, Sebastien Couvidat⁵, Phil Scherrer⁵, and Jesper Schou⁶

2014 ApJL 780 L28

<https://iopscience.iop.org/article/10.1088/2041-8205/780/2/L28/pdf>

<https://iopscience.iop.org/article/10.1088/2041-8205/780/2/L28>

HMI as “Coronagraph”?

Juan-Carlos Martínez [Oliveros](#)

HMI Science Nuggets #9, March 2014

<http://hmi.stanford.edu/hminuggets/?p=560>

14 May – 01:16: X3.2 вспышка, **пересвет** на STEREO-B, $B=116^{\circ}2/300=0,77$

14 May - 01:07: **X3.2 LDE** вспышка, вблизи E-лимба; **S15~2100 sfu**; мощный CME
~>05 UT- эрупция SE волокна **Prolonged gamma**

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

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

Квазипериодические пульсации в солнечных и звездных вспышках. Обзор **Review**

Куприянова Е.Г., Колотков Д.Ю., Накаряков В.М., Кауфман А.С.
СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 6. 2020. № 1 С. 3–29.
<https://naukaru.ru/ru/storage/viewWindow/50116>

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

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. MacDowall¹

2018 ApJL 868 L19

<http://iopscience.iop.org/article/10.3847/2041-8213/aaef36/pdf> **File**

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**

Detection and Interpretation of Long-lived X-Ray Quasi-periodic Pulsations in the X-class Solar Flare on 2013 May 14

Brian R. **Dennis**¹, Anne K. Tolbert^{1,2}, Andrew Inglis^{1,2}, Jack Ireland^{1,3}, Tongjiang Wang^{1,2}, Gordon D. Holman¹, Laura A. Hayes^{3,4}, and Peter T. Gallagher

2017 ApJ 836 84

<http://iopscience.iop.org/article/10.3847/1538-4357/836/1/84/pdf>

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

<http://arxiv.org/pdf/1507.08895v1.pdf>

Study of multi-periodic coronal pulsations during an X-class solar flare

Partha **Chowdhury**, **A.K. Srivastava**, **B.N. Dwivedi**, **Robert Sych**, **Y.-J. Moon**

Advances in Space Research,

2015

<http://arxiv.org/pdf/1507.02009v1.pdf>

Soft X-ray Pulsations in Solar Flares

Paulo J. A. [Simões](#), Hugh S. Hudson, Lyndsay Fletcher

Solar Phys. 2015

<http://arxiv.org/pdf/1412.3045v1.pdf>

1-15 May

Variation of Coronal Activity from the Minimum to Maximum of Solar Cycle 24 using Three Dimensional Coronal Electron Density Reconstructions from STEREO/COR1

Tongjiang [Wang](#), Nelson L. Reginald, Joseph M. Davila, O. Chris St. Cyr, William T. Thompson
Solar Phys. 2017

<https://arxiv.org/pdf/1706.05116.pdf>

14 May-11 June

Uncertainty Estimates of Solar Wind Prediction using HMI Photospheric Vector and Spatial Standard Deviation Synoptic Maps

Bala [Poduval](#), [Gordon Petrie](#), [Luca Bertello](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2008.06538.pdf>

15 May – 01:46 – X1.2 вспышка; **пересвет** на STEREO-B, $B=55*2/300=0,37$

15 May - 01:07: **X1.2 LDE** вспышка, N11E64; **S9~1400 sfu**; мощный CME; медленно нарастающие протоны **Prolonged gamma**

The Spatial and Temporal Variations of Turbulence in a Solar Flare

[Morgan Stores](#), [Natasha L. S. Jeffrey](#), [Eduard P. Kontar](#)

ApJ 2021

<https://arxiv.org/pdf/2110.01542.pdf>

First Fermi-LAT Solar Flare **Catalog**

M. [Ajello](#)¹, L. Baldini², D. Bastieri^{3,4}, R. Bellazzini⁵, A. Berretta⁶, E. Bissaldi^{7,8}, R. D. Blandford⁹, R. Bonino^{10,11}, P. Bruel¹², S. Buson¹³Show full author list

2021 ApJS 252 13

<https://arxiv.org/pdf/2101.10010.pdf> File

<https://doi.org/10.3847/1538-4365/abd32e>

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

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

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. 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)**

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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 Mäkelä1,2, Seiji Yashiro1,2, Alejandro Lara1,2, Hong Xie1,2, Sachiko Akiyama1,2, and Robert J. MacDowall1

2018 ApJL 868 L19

<http://iopscience.iop.org/article/10.3847/2041-8213/aaef36/pdf> File

Coronal hard X-ray sources revisited

Brian R. [Dennis](#), [Miguel A. Duval-Poo](#), [Michele Piana](#), [Andrew R. Inglis](#), [A. Gordon Emslie](#), [Jingnan Guo](#), [Yan Xu](#)

ApJ **2018**

<https://arxiv.org/pdf/1809.04631.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

Turbulent kinetic energy in the energy balance of a solar flare

E. P. [Kontar](#), J. E. Perez, L. K. Harra, [A. A. Kuznetsov](#), [A. G. Emslie](#), [N. L. S. Jeffrey](#), [N. H. Bian](#), [B. R. Dennis](#)

Physical Review Letters **2017**

<https://arxiv.org/pdf/1703.02392.pdf>

First evidence of non-Gaussian solar flare EUV spectral line profiles and accelerated non-thermal ion motion

Natasha [Jeffrey](#), Lyndsay Fletcher, Nicolas Labrosse

A&A **2016**

<http://arxiv.org/pdf/1601.07308v1.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>

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>

Soft X-ray Pulsations in Solar Flares

Paulo J. A. [Simões](#), Hugh S. Hudson, Lyndsay Fletcher
Solar Phys. 2015
<http://arxiv.org/pdf/1412.3045v1.pdf>

16 May – 21:53: M1.3/1N flare, N13E41?

Observing the Sun with the Murchison Widefield Array

D. [Oberoi](#) (1), R. Sharma (1), S. Bhatnagar (2), C. J. Lonsdale (3), L. D. Matthews (3), I. H. Cairns and many others
31st URSI General Assembly and Scientific Symposium, 2014
<http://arxiv.org/pdf/1403.6250v1.pdf>

16-17 May

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>

17 May – 08:57: **M3.2/2B LDE flare**, N12E57-ошибка, ~E35, S5~800 sfu, **large coronal wave**, CME,

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>

Shock wave driven by CME evidenced by metric type II burst and EUV wave

R.D. [Cunha-Silva](#), F.C.R. Fernandes, C.L. Selhorst
Advances in Space Research Volume 56, Issue 12, 15 December 2015, Pages 2804–2810
<http://www.sciencedirect.com/science/article/pii/S0273117715005311>

Full Stokes observations in the He I 1083 nm spectral region covering an M3.2 flare

C. [Kuckein](#) (1), M. Collados (2,3), R. Manso Sainz (2,3), A. Asensio Ramos
the conference proceedings of the IAUS 305: "Polarimetry: From the Sun to Stars and Stellar Environments" 2015
<http://arxiv.org/pdf/1502.05505v1.pdf>

Magnetic and Dynamical Photospheric Disturbances Observed During an M3.2 Solar Flare

C. [Kuckein](#)¹, M. Collados^{2,3}, and R. Manso Sainz
2015 ApJ 799 L25
<http://arxiv.org/pdf/1501.04207v1.pdf>

18-19 May – **небольшие бури** от эрупций предшествующих дней:

18d, 05 UT – Dst~-63 nT, 19d, 15 UT – Dst~-56 nT

A CME hit Earth's magnetic field on May 18th at around 0100 UT. Although it was just a **glancing blow**, the impact was enough to **spark** a G1-class geomagnetic storm.

A pair of CMEs hit Earth--one on May 18th (0100 UT) and another on May 19th (2250 UT). The interplanetary magnetic field has been predominantly northwards since then causing only minor geomagnetic effects.

Вспышечная активность на Солнце и особенности выхода новых магнитных потоков в 2011-2013 гг.

А.А.[Головко](#)

ИКИ-2014, Сессия: Солнце

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

20 May – 05:26 – M1.7 вспышка; **пересвет** на STEREO-B, $B=24*2/300=0,16$

20 May - ~11 UT: заметная центральная эрупция из той же области; корональная волна comprehensive solar flare indices

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>

Homologous Flux Ropes Observed by SDO/AIA

Ting [Li](#) & Jun Zhang

E-print, Oct 2013; ApJL

<http://arxiv.org/abs/1310.8041>

21 May

Studies of Isolated and Non-isolated Photospheric Bright Points in an Active Region Observed by the New Vacuum Solar Telescope

Yanxiao [Liu](#)^{1,2,3}, Yongyuan Xiang^{1,3}, Robertus Erdélyi^{4,5}, Zhong Liu^{1,3}, Dong Li^{6,7}, Zongjun Ning^{6,7}, Yi Bi^{1,2,3}, Ning Wu⁸, and Jun Lin^{1,3}

2018 ApJ 856 17

<http://sci-hub.tw/10.3847/1538-4357/aab150>

21-23 May

Multipoint study of successive coronal mass ejections driving moderate disturbances at 1 AU

Erika [Palmerio](#), [Camilla Scolini](#), [David Barnes](#), [Jasmina Magdalenic](#), [Matthew J. West](#), [Andrei N. Zhukov](#), [Luciano Rodriguez](#), [Marilena Mierla](#), [Simon W. Good](#), [Diana E. Morosan](#), [Emilia K. J. Kilpua](#), [Jens Pomoell](#), [Stefaan Poedts](#)

ApJ 2019

<https://arxiv.org/pdf/1906.01353.pdf>

22 May: ~09 UT - NW эрупция (волокна), C2 LDE вспышка, крупный CME; медленнодрейфующий дкм-кониум;

13:32 - эрупция в более западной прилибровой области, M5 LDE вспышка, микроволны незначительные, S3~370 sfu, крупный CME, быстро догоняющий предыдущий, тоже крупный; мощная ПЭ аркада, серьезные длительные протоны, сначала очень жесткие, F10~100 pfu с последующим медленным ростом до >1000 pfu !!! Дкм- и км- всплески II типа с продолжением 23-его, усиление во время вероятного взаимодействия двух крупных CMEs

Солнечные вспышки с продолжительным гамма-излучением и характеристики потоков протонов высоких энергий.

Томозов В.М., Минасянц Г.С., Минасянц Т.М.

СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 9 № 4 , 2023

С. 38–43.

<https://naukaru.ru/ru/storage/viewWindow/138048>

Statistical Investigation of the Widths of Supra-arcade Downflows Observed During a Solar Flare

[Guangyu Tan](#), [Yijun Hou](#), [Hui Tian](#)

MNRAS 2023

<https://arxiv.org/pdf/2304.11307.pdf>

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>

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

Energy Spectra vs. Element Abundances in Solar Energetic Particles and the Roles of Magnetic Reconnection and Shock Acceleration

Donald V. [Reames](#)

Solar Phys. 2021

<https://arxiv.org/ftp/arxiv/papers/2112/2112.01568.pdf> File

DH Type II Radio Bursts During Solar Cycles 23 and 24: Frequency-dependent Classification and their Flare-CME Associations

Binal D. [Patel](#) (USO/PRL), [Bhuwan Joshi](#) (USO/PRL), [Kyung-Suk Cho](#) (SSD/KASI), [Rok-Soon Kim](#) (DASS/UST)

Solar Phys. 2021

<https://arxiv.org/pdf/2108.12990.pdf>

Electron acceleration and radio emission following the early interaction of two coronal mass ejections

[D. E. Morosan](#), [E. Palmerio](#)¹ [J. E. Räsänen](#), [E. K. J. Kilpua](#), [J. Magdalenic](#), [B. J. Lynch](#), [A. Kumari](#), [J. Pomoell](#), [M. Palmroth](#)

A&A 2020

<https://arxiv.org/pdf/2008.10245.pdf>

Sequential Lid Removal in a Triple-Decker Chain of CME-Producing Solar Eruptions

Navin Chandra [Joshi](#), Alphonse C. Sterling, Ronald L. Moore, Bhuwan Joshi

ApJ 2020

<https://arxiv.org/abs/2008.04525>

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>

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

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>

A study on radio-loud interacting/non-interacting CMEs-associated SEPs and solar flares

P. Pappa [Kalaivani](#), O. Prakash, Li Feng, A. Shanmugaraju, ... Weiqun Gan
[Advances in Space Research](#) Volume 63, Issue 10, 15 May 2019, Pages 3390-3403
sci-hub.se/10.1016/j.asr.2019.01.019

Quantifying Turbulent Dynamics Found within the Plasma Sheets of Multiple Solar Flares

Michael S. [Freed](#)^{1,2} and David E. McKenzie^{1,3}

2018 ApJ 866 29

<http://sci-hub.tw/http://iopscience.iop.org/article/10.3847/1538-4357/aadee4/meta>

Quasi-periodic Counter-propagating Fast Magnetosonic Wave Trains from Neighboring Flares: SDO/AIA Observations and 3D MHD Modeling

[Leon Ofman](#), [Wei Liu](#)

ApJ 860 54 2018

<https://arxiv.org/pdf/1805.00365.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>

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>

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>

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

2017 ApJ 838 70

<http://sci-hub.cc/10.3847/1538-4357/aa656f>

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

[Solar Physics](#) January 2017, 292:10

<http://link.springer.com/article/10.1007/s11207-016-1033-8>

Interaction between Coronal Mass Ejections: Limited Spatial Extent Revealed by SOHO Observations

[Gopalswamy](#), Nat; Reiner, Mike J.; Makela, Pertti; Yashiro, Seiji

41st COSPAR Scientific Assembly, abstracts from the meeting that was to be held 30 July - 7 August

2016 at the Istanbul Congress Center (ICC), Turkey, but was cancelled. Abstract D2.1-9-16

Source Regions of the Type II Radio Burst Observed During a CME-CME Interaction on 2013 May 22

P. [Mäkelä](#), N. Gopalswamy, M. J. Reiner, S. Akiyama, V. Krupar

ApJ **2016**
<http://arxiv.org/pdf/1606.06989v1.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

Temperature of the Source Plasma in Gradual Solar Energetic Particle Events

Donald V. **Reames**

Solar Phys. **2015**
<http://arxiv.org/pdf/1509.08948v1.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**

Interaction between Two Coronal Mass Ejections in the 2013 May 22 Large Solar Energetic Particle Event

Liu-Guan **Ding**^{1,2}, Gang Li², Yong Jiang³, Gui-Ming Le⁴, Cheng-Long Shen⁵, Yu-Ming Wang⁵, Yao Chen⁶, Fei Xu¹, Bin Gu¹, and Ya-Nan Zhang
2014 ApJ 793 L35.

Homologous Flux Ropes Observed by SDO/AIA

Ting **Li** & Jun Zhang
E-print, Oct **2013**; ApJL
<http://arxiv.org/abs/1310.8041>

Tracking the Evolution of A Coherent Magnetic Flux Rope Continuously from the Inner to the Outer Corona

X. **Cheng**, M. D. Ding, Y. Guo, J. Zhang, A. Vourlidas, Y. D. Liu, O. Olmedo, J. Q. Sun, and C. Li
E-print, Oct **2013**, **File**; ApJ

22-23 May

Detection of Solar Wind Disturbances: Mexican Array Radio Telescope IPS Observations at 140 MHz

E. **Romero-Hernandez**, J. A. Gonzalez-Esparza, E. Aguilar-Rodriguez, V. Ontiveros-Hernandez, P. Villanueva-Hernandez
Solar Phys. Volume 290, Issue 9, pp 2553-2566 **2015**

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>

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>

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>

23 May – продолжает развиваться большая ПЭ аркада над местом эрупции 22-ого;
>03 UT –NW эрупция;
>15 UT – существенная NW эрупция;
~19:30 – центральная эрупция

Multipoint study of successive coronal mass ejections driving moderate disturbances at 1 AU

Erika **Palmerio**, [Camilla Scolini](#), [David Barnes](#), [Jasmina Magdalenić](#), [Matthew J. West](#), [Andrei N. Zhukov](#), [Luciano Rodriguez](#), [Marilena Mierla](#), [Simon W. Good](#), [Diana E. Morosan](#), [Emilia K. J. Kilpua](#), [Jens Pomoell](#), [Stefaan Poedts](#)

ApJ 2019

<https://arxiv.org/pdf/1906.01353.pdf>

23-24 May

Energy Spectra vs. Element Abundances in Solar Energetic Particles and the Roles of Magnetic Reconnection and Shock Acceleration

Donald V. **Reames**

Solar Phys. 2021

<https://arxiv.org/ftp/arxiv/papers/2112/2112.01568.pdf> File

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>

25 May

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

27-31 May

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>

Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures

Nariaki V. **Nitta**, Tamitha Mulligan

[Solar Physics](#) September 2017, 292:125 File

28 May – 6 June

The temporal and spatial scales of density structures released in the slow solar wind during solar activity maximum

Eduardo [Sanchez-Diaz](#), [Alexis P. Rouillard](#), [Jackie A. Davies](#), [Benoit Lavraud](#), [Rui F. Pinto](#), [Emilia Kilpua](#)

ApJ 2017

<https://arxiv.org/ftp/arxiv/papers/1711/1711.02486.pdf>

Observational evidence for the associated formation of blobs and raining inflows in the solar Corona

Eduardo [Sanchez-Diaz](#), [Alexis P. Rouillard](#), [Jackie A. Davies](#), [Benoit Lavraud](#), [Neil R. Sheeley](#), [Rui F. Pinto](#), [Emilia Kilpua](#), [Illya Plotnikov](#), [Vincent Genot](#)

ApJL 2016

<https://arxiv.org/pdf/1612.05487v1.pdf>

29 May

CME Propagation Through the Heliosphere: Status and Future of Observations and Model Development Review

M. [Temmer](#), [C. Scolini](#), [I. G. Richardson](#), [S. G. Heinemann](#), + + +

Advances in Space Research 2023

<https://arxiv.org/pdf/2308.04851.pdf>

How to Estimate the Far-Side Open Flux using STEREO Coronal Holes

Stephan G. [Heinemann](#), [Manuela Temmer](#), [Stefan J. Hofmeister](#), [Aleksandar Stojakovic](#), [Laurent Gizon](#), [Dan Yang](#)

Solar Phys. 2021

<https://arxiv.org/pdf/2109.02375.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>

A statistical study of the long-term evolution of coronal hole properties as observed by SDO

S. G. [Heinemann](#)¹, V. [Jerčić](#)^{1,2}, M. [Temmer](#)¹, S. J. [Hofmeister](#)¹, M. [Dumbović](#)^{1,3}, S. [Vennerstrom](#)⁴, G. [Verbanac](#)⁵ and A. M. [Veronig](#)^{1,6}

A&A 638, A68 (2020)

<https://www.aanda.org/articles/aa/pdf/2020/06/aa37613-20.pdf>

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>

Coronal Hole Statistical Analysis and Catalogue covering the SDO-era

Stephan G. [Heinemann](#), [Temmer Manuela](#), [Heinemann Niko](#), [Dissauer Karin](#), [Samara Evangelia](#), [Jerčić Veronika](#), [Stefan J. Hofmeister](#), [Astrid M Veronig](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1907.01990.pdf>

30 May – CH

Characteristics of Low-latitude Coronal Holes near the Maximum of Solar Cycle 24

Stefan J. [Hofmeister](#)¹, Astrid Veronig¹, Martin A. Reiss¹, Manuela Temmer¹, Susanne Vennerstrom², Bojan Vršnak³, and Bernd Heber⁴

2017 ApJ 835 268 DOI: 10.3847/1538-4357/835/2/268

<https://arxiv.org/pdf/1702.02050.pdf>

Short term Variability of the Sun Earth System: An Overview of Progress Made during the CAUSES II Period **Review**

Nat [Gopalswamy](#), Bruce Tsurutani, Yihua Yan

Progress in Earth and Planetary Science, 2015

<http://arxiv.org/pdf/1504.06332v1.pdf>

30 May-1 Jun

The Sun and Space Weather **Review**

[Nat Gopalswamy](#)

Atmosphere, vol. 13, issue 11, p. 1781, 2022 File

<https://www.mdpi.com/2073-4433/13/11/1781/pdf?version=1666956880>

<https://doi.org/10.3390/atmos13111781>

<https://arxiv.org/ftp/arxiv/papers/2211/2211.06775.pdf>

31 May - ~>12 UT – **эрупция большого северного волокна, 304 A, CME направлен к северу**

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

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

Spatial properties of the complex decameter type II burst observed on 31 May 2013...

Vladimir [Dorovskyy](#), Valentin Melnik, Alexander Konovalenko, Anatoly Brazhenko, Helmut Rucker
SUN and GEOSPHERE Vol.13, No.1 – 2018 p.25÷30

http://newserver.stil.bas.bg/SUNGEO/00SGArhiv/SG_v13_No1_2018-pp-25-30.pdf

http://ws-sozopol.stil.bas.bg/2017Sunny/Proceedings2017_V3.pdf

Intense Geomagnetic Storms Associated with Coronal Holes Under the Weak Solar-Wind Conditions of Cycle 24

S. Watari

[Solar Physics](#) February 2018, 293:23

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1248-y.pdf>

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

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>

31 May-3 Jun

Thermosphere modeling capabilities assessment: geomagnetic storms

Sean **Bruinsma**^{1*}, Claude Boniface¹, Eric K. Sutton² and Mariangel Fedrizzi³

J. Space Weather Space Clim. **2021**, 11, 12

<https://www.swsc-journal.org/articles/swsc/pdf/2021/01/swsc200061.pdf>

June 2013 The Sunrise balloon-borne solar observatory second science flight

See ApLS Volume 229, Number 1, 2017

<http://iopscience.iop.org/issue/0067-0049/229/1>

31 May-14 June

Active region fine structure observed at 0.08 arcsec resolution

R. **Schlichenmaier**, O. von der Lühe, S. Hoch, [D. Soltau](#), [T. Berkefeld](#), [D. Schmidt](#), [W. Schmidt](#), [C. Denker](#), [H. Balthasar](#), [A. Hofmann](#), [K. G. Strassmeier](#), [J. Staude](#), [A. Feller](#), [A. Lagg](#), [S. K. Solanki](#), [M. Collados](#), [M. Sigwarth](#), [R. Volkmer](#), [T. Waldmann](#), [F. Kneer](#), [H. Nicklas](#), [M. Sobotka](#)

A&A **2016**

<http://arxiv.org/pdf/1607.07094v1.pdf>

1 июня – серьезная буря, видимо, от корональной дыры, Dst~-125 нТл

Intense Geomagnetic Storms Associated with Coronal Holes Under the Weak Solar-Wind Conditions of Cycle 24

S. Watari

[Solar Physics](#) February **2018**, 293:23

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1248-y.pdf>

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>

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**

[\[hub.cc/http://onlinelibrary.wiley.com/doi/10.1002/2017JA024735/abstract;jsessionid=48E043E86C22084A1908FD5A8ADEFDAFC.f03t01\]\(http://onlinelibrary.wiley.com/doi/10.1002/2017JA024735/abstract;jsessionid=48E043E86C22084A1908FD5A8ADEFDAFC.f03t01\)](http://sci-</p></div><div data-bbox=)

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David **Webb**, Nariaki Nitta

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

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>

Short term Variability of the Sun Earth System: An Overview of Progress Made during the CAUSES II Period **Review**

Nat [Gopalswamy](#), Bruce Tsurutani, Yihua Yan

Progress in Earth and Planetary Science, **2015**, File

<http://arxiv.org/pdf/1504.06332v1.pdf>

See p. 30

2 June

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>

Observation and Modeling of Solar Jets

Review

[Yuandeng Shen](#)

Proceedings of the Royal Society A **2021**

<https://arxiv.org/pdf/2101.04846.pdf>

Stereoscopic Observations of an Erupting Mini-filament Driven Two-Sided-Loop Jet and the Applications for Diagnosing Filament Magnetic field

Yuandeng [Shen](#), [Zhining Qu](#), [Ding Yuan](#), [Heading Chen](#), [Yadan Duan](#), [Chengrui Zhou](#), [Zehao Tang](#), [Jin Huang](#), [Yu Liu](#)

ApJ **2019**

<https://arxiv.org/pdf/1908.03660.pdf>

2-6 June

Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures

Nariaki V. [Nitta](#), Tamitha Mulligan

[Solar Physics](#) September **2017**, 292:125 File

3 June – 07:25: западная (S27W21) C9.5 вспышка со слабыми микроволнами и без протонов; эрупция, CME

5 June – 09:21: M1.3 вспышка, **пересвет** на STEREO-A, $A=14*2/313=0,09$

5 June – 08:57: западная высокоширотная (S32W51) M1.3/1F вспышка с умеренными микроволнами ($S<500$) и без протонов; эрупция, CME

MATERIAL SUPPLY AND MAGNETIC CONFIGURATION OF AN ACTIVE REGION FILAMENT

P. [Zou](#)^{1,2,3}, C. Fang^{1,2,3}, P. F. Chen^{1,2,3}, K. Yang^{1,2,3}, Q. Hao^{1,2,3}, and Wenda Cao⁴
2016 ApJ 831 123

6-7 – **форбуш и буря Dst~-75 нТл**

Spectral observations of Ellerman bombs and fitting with a two-cloud model

Jie **Hong**, M. D. Ding, Ying Li, Cheng Fang, Wenda Cao

ApJ, 2014

<http://arxiv.org/pdf/1407.3048v1.pdf>

6 June –

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

Spectral Diagnostics of Solar Photospheric Bright Points

Q. **Hao**, [C. Fang](#), [M. D. Ding](#), [Z. Li](#), [W. Cao](#)

ApJ 2020

<https://arxiv.org/pdf/2007.09675.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>

Diagnostics of Ellerman Bombs with High-resolution Spectral Data

Z. **Li**, [C. Fang](#), [Y. Guo](#), [P. F. Chen](#), [Z. Xu](#), [W. Cao](#)

RAA 2015

<http://arxiv.org/pdf/1504.02538v1.pdf>

7 June – 22:50: M5.9 вспышка, **пересвет** на STEREO-A, $A=35^{\circ}2/313=0,22$

7 June – 22:49: западная лимбовая высокоширотная M5.9 вспышка с приличными микроволнами ($S_{\nu} \sim 1000$) и без протонов; крупный CME

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>

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>

8 June

Multi-viewpoint Coronal Mass Ejection Catalog Based on STEREO COR2 Observations

Angelos **Vourlidas**^{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>

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>

10 June

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>

12 June

Preprocessing of vector magnetograms for magnetohydrostatic extrapolations

[Xiaoshuai Zhu](#), [Thomas Wiegmann](#), [Bernd Inhester](#)

A&A 2020

<https://arxiv.org/pdf/2010.06174.pdf>

Magnetohydrostatic modeling of AR11768 based on a SUNRISE/IMaX vector magnetogram

[Xiaoshuai Zhu](#), [Thomas Wiegmann](#), [Sami Solanki](#)

A&A 2020

<https://arxiv.org/pdf/2005.14332.pdf>

Cancellation of Small-Scale Magnetic Features

Anjali J. [Kaithakkal](#), [Sami K. Solanki](#)

A&A 2019

<https://arxiv.org/pdf/1812.11496.pdf>

Intensity contrast of solar plage as a function of magnetic flux at high spatial resolution

F. [Kahil](#), [T. L. Riethmüller](#), [S. K. Solanki](#)

A&A 2018

<https://arxiv.org/pdf/1811.05759.pdf>

A Cancellation Nanoflare Model for Solar Chromospheric and Coronal Heating

E.R. [Priest](#), [L.P. Chitta](#), [P. Syntelis](#)

2018

<https://arxiv.org/pdf/1807.08161.pdf>

Observations of solar chromospheric heating at sub-arcsec spatial resolution

H. N. [Smitha](#), [L. P. Chitta](#), [T. Wiegmann](#), [S. K. Solanki](#)

A&A 2018

<https://arxiv.org/pdf/1807.01078.pdf>

Maximum Entropy Limit of Small-scale Magnetic Field Fluctuations in the Quiet Sun

A. Y. [Gorobets](#), [S.V. Berdyugina](#), [T. L. Riethmüller](#), [J. Blanco Rodríguez](#), [S. K. Solanki](#), [P. Barthol](#), [A. Gandorfer](#), [L. Gizon](#), [J. Hirzberger](#), [M. van Noort](#), [J.C. Del Toro Iniesta](#), [D. Orozco Suárez](#), [W. Schmidt](#), [V. Martínez Pillet](#), [M. Knölker](#)

Astrophysical Journal Supplement Series

2017

<https://arxiv.org/pdf/1710.08361.pdf>

Magneto-static modelling from SUNRISE/IMaX: Application to an active region observed with SUNRISE II

T. [Wiegmann](#), T. Neukirch, D.H. Nickeler, [S.K. Solanki](#), [P. Barthol](#), [A. Gandorfer](#), [L. Gizon](#), [J. Hirzberger](#), [T.L. Riethmüller](#), [M. van Noort](#), [J. Blanco Rodríguez](#), [J. C. Del Toro Iniesta](#), [D. Orozco Suárez](#), [W. Schmidt](#), [V. Martínez Pillet](#), [M. Knölker](#)

ApJS 2017 Sunrise special issue

<https://arxiv.org/pdf/1701.01458v1.pdf>

Spectropolarimetric evidence for a siphon flow along an emerging magnetic flux tube

Iker S. **Requerey**, B. Ruiz Cobo, J. C. Del Toro Iniesta, D. Orozco Suárez, J. Blanco Rodríguez, S. K. Solanki, P. Barthol, A. Gandorfer, L. Gizon, J. Hirzberger, T. L. Riethmüller, M. van Noort, W. Schmidt, V. Martínez Pillet, M. Knölker

ApJS 2016

<https://arxiv.org/pdf/1611.06732v1.pdf>

Solar coronal loops associated with small-scale mixed polarity surface magnetic fields

L. P. **Chitta**, H. Peter, S. K. Solanki, P. Barthol, A. Gandorfer, L. Gizon, J. Hirzberger, T. L.

Riethmueller, M. van Noort, J. Blanco Rodriguez, J. C. Del Toro Iniesta, D. Orozco Suarez, W. Schmidt, V. Martinez Pillet, M. Knoelker

Astrophysical Journal Supplement Series 2016

<https://arxiv.org/pdf/1610.07484v1.pdf>

A Tale of Two Emergences: Sunrise II Observations of Emergence Sites in a Solar Active Region

Rebecca **Centeno**, Julian Blanco Rodriguez, Jose Carlos Del Toro Iniesta, Sami K. Solanki, Peter Barthol, Achim Gandorfer, Laurent Gizon, Johann Hirzberger, Tino L. Riethmuller, Michiel van Noort, David Orozco Suarez, Wolfgang Schmidt, Valentin Martinez Pillet, Michael Knolker

the Sunrise II Special Issue in the Astrophysical Journal Supplement Series 2016

<https://arxiv.org/pdf/1610.03531v1.pdf>

Photospheric response to EB-like event

S. **Danilovic**, S. K. Solanki, P. Barthol, A. Gandorfer, L. Gizon, J. Hirzberger, T. L. Riethmüller M. van Noort, J. Blanco Rodríguez, J. C. Del Toro Iniesta, D. Orozco Suárez, W. Schmidt, V. Martínez Pillet, M. Knölker

ApJS 2016

<http://arxiv.org/pdf/1609.03817v1.pdf>

Filaments and Magnetic Memory in the Solar Corona

Anthony **Yeates**

UKSP Nugget: 47, 2014

<http://www.uksolphys.org/uksp-nugget/47-filaments-and-magnetic-memory-in-the-solar-corona/>

12-13 June

Power spectrum of turbulent convection in the solar photosphere

[L. Yelles **Chaouche**](#), [R. H. Cameron](#), [S. K. Solanki](#), et al.

A&A 2020

<https://arxiv.org/pdf/2010.09037.pdf>

13 June

Intensity and velocity oscillations in a flaring active region

David C L **Millar**, Lyndsay Fletcher, Jayant Joshi

Monthly Notices of the Royal Astronomical Society, Volume 527, Issue 3, January 2024, Pages 5916–5928,

<https://doi.org/10.1093/mnras/stad3386>

<https://academic.oup.com/mnras/article-pdf/527/3/5916/54021982/stad3386.pdf>

<https://watermark.silverchair.com/stad3386.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>

13-15 Jun

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>

14 June

Multi-mode quasi-periodic pulsations in a solar flare

Kolotkov, D. Y., Nakariakov, V. M., Kupriyanova, E. G., Ratcliffe, H., Shibasaki, K.

A&A, 574, A53 (2015)

E-print, Dec 2014

High Resolution Observations of Chromospheric Jets in Sunspot Umbra

Yurchyshyn, V., Abramenko, V., Kosovichev, A., and Goode, P.

E-print, April 2014, ApJ, 2014

http://www.bbso.njit.edu/~vayur/spikes/VYurchyshyn_Spikes.pdf

<http://arxiv.org/pdf/1404.7444v1.pdf>

14-20 June

A Semi-Automatic Method to Measure the Rotation of Sunspots

Daniel Brown & **Andrew Walker**

Solar Physics volume 296, Article number: 48 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01787-4.pdf>

17-18 June

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

18-19 June

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>

19 June

Particle Acceleration and Their Escape into the Heliosphere in Solar Flares with Open Magnetic Field

Mykola **Gordovskyy**^{1,2}, Philippa K. Browning², Kanya Kusano³, Satoshi Inoue⁴, and Grigory E. Vekstein²

2023 ApJ 952 75

<https://arxiv.org/pdf/2305.19449.pdf>

<https://iopscience.iop.org/article/10.3847/1538-4357/acdb4d/pdf>

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>

Arcade Implosion Caused by a Filament Eruption in a Flare

Juntao [Wang](#), P. J. A. Simoes, L. Fletcher, J. K. Thalmann, H. S. Hudson, I. G. Hannah
ApJ **2016**
<https://arxiv.org/pdf/1610.05931v1.pdf> File

Semicircular-like Secondary Flare Ribbons Associated with a Failed Eruption
R. [Zheng](#)¹, M. B. Korsós^{1,2}, and R. Erdélyi
2015 ApJ 809 45

19-22 June

Electric Current Neutralization in Solar Active Regions and Its Relation to Eruptive Activity

Ellis A. [Avallone](#), [Xudong Sun](#)
ApJ **2020**
<https://arxiv.org/pdf/2003.02814.pdf>

Comparison of Cylindrical Interplanetary Flux-Rope Model Fitting with Different Boundary Pitch-Angle Treatments

N. [Nishimura](#), K. Marubashi, M. Tokumaru
[Solar Physics](#) April **2019**, 294:49
<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1435-5.pdf>

Field distribution of magnetograms from simulations of active region formation

S. [Dacie](#)¹, L. van Driel-Gesztelyi^{1, 2, 3}, P. Démoulin², M. G. Linton⁴, J. E. Leake^{4,5}, D. MacTaggart⁶ and M. C. M. Cheung⁷
A&A 606, A34 (**2017**)
<https://www.aanda.org/articles/aa/pdf/2017/10/aa30767-17.pdf>

20 Jun

Testing and Validating Two Morphological Flare Predictors by Logistic Regression Machine Learning

[M. B. Korsos](#), [R. Erdelyi](#), [J. Liu](#), [H. Morgan](#)
2020
<https://arxiv.org/pdf/2012.08164.pdf>

21 June – 03:21: **M2.9** вспышка, **пересвет** на STEREO-B, $B=16,5*2/300=0,11$

21 June – 03:14: восточная (S16E73) **M2.9/ 1F LDE** вспышка с S3~6000sfu, дм-компонентой и с медленно нарастающими протонами ~8-10 pfu

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>

Magnetic Helicity Flux Oscillations in the Atmospheres of Flaring and Nonflaring Active Regions

M. B. [Korsós](#)^{1,2,3}, R. Erdélyi^{2,3,4}, X. Huang⁵, and H. Morgan¹
2022 ApJ 933 66
<https://iopscience.iop.org/article/10.3847/1538-4357/ac7469/pdf>

Acceleration of Solar Energetic Particles through CME-driven Shock and Streamer Interaction

Federica **Frassati**¹, Monica Laurenza², Alessandro Bemporad¹, Matthew J. West³, Salvatore Mancuso¹, Roberto Susino¹, Tommaso Alberti², and Paolo Romano⁴
2022 ApJ 926 227
<https://iopscience.iop.org/article/10.3847/1538-4357/ac460e/pdf>

Properties of DH Type II Radio Bursts and Their Space Weather Implications

N. **Gopalswamy**, [P. Mäkelä](#)
submitted to the URSI AP-RASC 2019 2018
<https://arxiv.org/ftp/arxiv/papers/1810/1810.11173.pdf>

Time variations of observed H α line profiles and precipitation depths of non-thermal electrons in a solar flare

R. **Falewicz**, [K. Radziszewski](#), [P. Rudawy](#), [A. Berlicki](#)
ApJ 2017
<https://arxiv.org/pdf/1708.09797.pdf>

Global Energetics of Solar Flares and CMEs: V. Energy Closure

Markus J. **Aschwanden**, Amir Campi, Christina M.S. Cohen, [Gordon Holman](#), [Ju Jing](#), [Matthieu Kretzschmar](#), [Eduard P. Kontar](#), [James McTiernan](#), [Richard A. Mewaldt](#), [Aidan O'Flannagain](#), [Ian G. Richardson](#), [Daniel Ryan](#), [Harry P. Warren](#), [Yan Xu](#)
ApJ 2017
<https://arxiv.org/pdf/1701.01176v1.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

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

21-23 June – слабые геомагнитные возмущения от большой КД

21 June – 03:21: M2.9 вспышка, пересвет на STEREO-B, $B=25 \cdot 2/300=0,17$

21 June

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>

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>

Properties of DH Type II Radio Bursts and Their Space Weather Implications

N. [Gopalswamy](#), [P. Mäkelä](#)

submitted to the URSI AP-RASC 2019 2018

<https://arxiv.org/ftp/arxiv/papers/1810/1810.11173.pdf>

Time variations of observed H α line profiles and precipitation depths of non-thermal electrons in a solar flare

R. [Falewicz](#), [K. Radziszewski](#), [P. Rudawy](#), [A. Berlicki](#)

ApJ 847 84 2017

<https://arxiv.org/pdf/1708.09797.pdf>

<https://iopscience.iop.org/article/10.3847/1538-4357/aa89e9/pdf>

Development of Solar Flares and Features of the Fine Structure of Solar Radio Emission

G.P. [Chernov](#), [V.V. Fomichev](#), [Y. Yan](#), [B. Tan](#), [Ch. Tan](#), [Q.Fu](#)

Geomagnetism and Aeronomy 2017

<https://arxiv.org/ftp/arxiv/papers/1711/1711.07531.pdf>

Complex Flare Dynamics Initiated by a Filament-Filament Interaction

Chunming [Zhu](#), Rui Liu, David Alexander, Xudong Sun, James McAteer

2015

<http://arxiv.org/pdf/1507.05889v1.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>

22 June

A Machine Learning Approach to Predicting SEP Events Using Properties of Coronal Mass Ejections

Jesse [Torres](#), [Lulu Zhao](#), [Philip K. Chan](#), [Ming Zhang](#)

Space Weather e2021SW002797 2022

<https://doi.org/10.1029/2021SW002797>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2021SW002797>

22- 24 Jun

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>

23 June - 20:56: **очень импульсная восточная (S15E62) M2.9/1N** вспышка со слабыми микроволнами

Ring of Stations Method in Cosmic Rays Variations Research

M. A. [Abunina](#), [A. V. Belov](#), [E. A. Eroshenko](#), [A. A. Abunin](#), [V. G. Yanke](#), [A. A. Melkumyan](#), [N. S. Shlyk](#) & [I. I. Pryamushkina](#)

[Solar Physics](#) volume 295, Article number: 69 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01639-7.pdf>

Difference of source regions between fast and slow coronal mass ejections

B. [Filippov](#)

PASAustralia 2019
<https://arxiv.org/pdf/1904.04060.pdf>

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
XXV European Cosmic Ray Symposium, Turin, Sept. 4-9 2016 2016
<https://arxiv.org/pdf/1612.08900v1.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

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>

23-27 June

Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures

Nariaki V. **Nitta**, Tamitha Mulligan
[Solar Physics](#) September 2017, 292:125 [File](#)

23-24 June – сильный форбуш при слабых бурях, видимо, тоже от КД

24 June – 11:32: еще одна импульсная восточная (S17E54) C9.9/1N вспышка

26 June

A Global Survey of EUV Corona Power Spectra

Karl **Battams** (1), Brendan M. Gallagher (2), Robert S. Weigel (2) ((1) US Naval Research Laboratory, (2) George Mason University)
Solar Phys. 294 11 2019
<https://arxiv.org/pdf/1707.02448.pdf>
<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1399-5.pdf>

A Global Survey of EUV Corona Power Spectra

Karl **Battams** (1), Brendan M. Gallagher (2), Robert S. Weigel (2) ((1) US Naval Research Laboratory, (2) George Mason University)
ApJ 2017
<https://arxiv.org/pdf/1707.02448.pdf>

26-30 June

Magnetic Power Spectra of Emerging Active Regions

Olga K. **Kutsenko**, [Alexander S. Kutsenko](#), [Valentina I. Abramenko](#)
Solar Phys. 2019
<https://arxiv.org/pdf/1907.07952.pdf>

27 June

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

OBSERVATIONS OF SMALL-SCALE ENERGETIC EVENTS IN THE SOLAR TRANSITION REGION: EXPLOSIVE EVENTS, UV BURSTS, AND NETWORK JETS

Zhenghua **Huang**, Bo Li, Lidong Xia.

Solar-Terrestrial Physics. 2019. Vol. 5. Iss. 2, pp. 58–68
Solnechno-zemnaya fizika, 2019, Vol. 5. Iss. 2. P. 63–73
<https://naukaru.ru/en/storage/view/36901>

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>

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>

27-28 June

Multiwavelength Study of Equatorial Coronal-Hole Jets

Pankaj [Kumar](#), [Judith T. Karpen](#), [Spiro K. Antiochos](#), [Peter F. Wyper](#), [C. Richard DeVore](#), [Craig E. DeForest](#)
ApJ 2019
<https://arxiv.org/pdf/1902.00922.pdf>

28 June – 01:59 (C4.4) and 03:37 (C7.3) – сдвоенная вспышка с CMEs без существенной эрупции

- приличный короткий форбуш

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

Nishtha [Sachdeva](#)
Ph.D. Thesis 2019
<https://arxiv.org/pdf/1907.12673.pdf>

29 June – существенная геомагнитная буря (Dst~99 nT) under the influence of a co-rotating interaction region associated with CH574.

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>

30 June

Observations and 3D MHD Modeling of a Confined Helical Jet Launched by a Filament Eruption

Lauren [Doyle](#), [Peter F. Wyper](#), [Eamon Scullion](#), [James A. McLaughlin](#), [Gavin Ramsay](#), [J. Gerard Doyle](#)
ApJ 2019
<https://arxiv.org/pdf/1912.02133.pdf>

Beam electrons as sources of H α ribbons in a C-class flare

Valentina [Zharkova](#), Malcolm Druett and Eamon Scullion (Northumbria)
UK Solar Physics (UKSP) – Nuggets #83. 2017 www.uksolphys.org/?p=13393

BEAM ELECTRONS AS A SOURCE OF H-alpha FLARE RIBBONS,

Druett M., Scullion E., Zharkova V., Matthews S., Zharkov S. and Van der Voort, L.P.
Nature Communications, Article number: 15905 2017,
<https://www.nature.com/articles/ncomms15905>
<http://www.nature.com/sci-hub.cc/articles/ncomms15905>

30 Jun-5 July

Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures

Nariaki V. **Nitta**, Tamitha Mulligan
Solar Physics September 2017, 292:125 File

1-2 July

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>

2 July

Conditions for electron-cyclotron maser emission in the solar corona

D. E. **Morosan**, P. Zucca, D. S. Bloomfield, P. T. Gallagher
A&A 2016
<http://arxiv.org/pdf/1604.04788v1.pdf>

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>

2-12 July

Three-dimensional magnetic reconnection in a collapsing coronal loop system

Aidan M. **O'Flannagain**, **Shane A. Maloney**, **Peter T. Gallagher**, **Philippa Browning**, **Jose Refojo**
A&A 2018
<https://arxiv.org/pdf/1806.09365.pdf>

3 July – 07:11: M1.5 вспышка, **пересвет** на STEREO-B, $B=28^{\circ}2/300=0,19$

3 July – 07:08 -восточная (S11E82) M1.5 вспышка, S9~160 sfu, **II тип на нашем спектре**

4 July

Statistical Studies on Modified Neupert Effect★

YU Wen-hui a b c, LI You-ping a b, GAN Wei-qun a b
Chinese Astronomy and Astrophysics Volume 45, Issue 1, 2021, Pages 82-98
<https://doi.org/10.1016/j.chinastron.2021.02.006>
<https://www.sciencedirect.com/science/article/abs/pii/S0275106221000060>
<https://sci-hub.ru/10.1016/j.chinastron.2021.02.006>

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>

Ellerman bombs at high resolution. IV. Visibility in Na I and Mg I

R. J. **Rutten**, L. H. M. Rouppe van der Voort, G. J. M. Vissers

ApJ 2015

<http://arxiv.org/pdf/1506.04426v1.pdf>

4-12 July

Differences in periodic magnetic helicity injection behaviour between flaring and non-flaring Active Regions: Case Study

M. B. [Korsos](#), P. Romano, H. Morgan, Y. Ye, R. Erdelyi, F. Zuccarello

2020

<https://arxiv.org/pdf/2006.07659.pdf>

5 July

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

See

http://solar.gmu.edu/wiki/presentations/ISEST_2015_workshop/WG1_data/Nitta_stealthy_sun_earth_events.pdf

Fan-shaped jets above the light bridge of a sunspot driven by reconnection★

Carolina [Robustini](#)¹, Jorrit Leenaarts¹, Jaime de la Cruz Rodriguez¹ and Luc Rouppe van der Voort
A&A 590, A57 (2016)

<http://www.aanda.org/articles/aa/pdf/2016/06/aa28022-15.pdf>

Peacock jets above the light bridge of a sunspot driven by reconnection

Carolina [Robustini](#), Jorrit Leenaarts, Jaime de la Cruz Rodriguez, Luc Rouppe van der Voort
ApJL 2015

<http://arxiv.org/pdf/1508.07927v1.pdf>

6 July – геомагнитная буря Dst~-73 нТл от северной КД

The most likely source is a co-rotating interaction region associated with a northern hemisphere coronal hole (which rotated across the central meridian several days ago).

See

http://solar.gmu.edu/wiki/presentations/ISEST_2015_workshop/WG1_data/Nitta_stealthy_sun_earth_events.pdf

Long-period quasi-periodic oscillations of a small-scale magnetic structure on the Sun

D. Y. [Kolotkov](#), V. V. Smirnova, P. V. Strelakova, A. Riehoakainen, and V. M. Nakariakov
A&A letters 2017

http://www2.warwick.ac.uk/fac/sci/physics/research/cfsa/people/kolotkov/eprints/facula_letter_r2.pdf

7-9 July

Homologous Cyclones in the Quiet Sun

Xinting [Yu](#)^{1,2}, Jun Zhang¹, Ting Li¹, Yuzong Zhang¹, and Shuhong Yang
2014 ApJ 782 L15

8 July

In situ measurements of the variable slow solar wind near sector boundaries

E. [Sanchez-Diaz](#) (IRAP), [A. Rouillard](#), [B. Lavraud](#) (IRAP), [E. Kilpua](#) (FMI), [J. Davies](#)
ApJ 2019

<https://arxiv.org/ftp/arxiv/papers/1911/1911.09683.pdf>

A Systematic Approach to the Reconstruction of Saturated SDO/AIA Images

Richard A [Schwartz](#), Gabriele Torre, Michele Piana
ApJL, 2014

<http://arxiv.org/pdf/1407.7343v1.pdf>

8-10 July

The temporal and spatial scales of density structures released in the slow solar wind during solar activity maximum

Eduardo [Sanchez-Diaz](#), [Alexis P. Rouillard](#), [Jackie A. Davies](#), [Benoit Lavraud](#), [Rui F. Pinto](#), [Emilia Kilpua](#)

ApJ 2017

<https://arxiv.org/ftp/arxiv/papers/1711/1711.02486.pdf>

9 July - A filament eruption in the northern central hemisphere began near 14h UTC and was associated with a faint full halo CME.

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

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

Bin [Zhuang](#)¹, Noé [Lugaz](#)¹, Nada [Al-Haddad](#)¹, Réka M. [Winslow](#)¹, Camilla [Scolini](#)¹, Charles J. [Farrugia](#)¹, and Antoinette B. [Galvin](#)¹

2023 ApJ 952 7

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

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

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>

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>

The effect of stream interaction regions on ICME structures observed in longitudinal conjunction

Reka M. [Winslow](#), [Camilla Scolini](#), [Noé Lugaz](#), [Antoinette B. Galvin](#)

ApJ 2021

<https://arxiv.org/pdf/2105.10602.pdf>

Uncovering Erosion Effects on Magnetic Flux Rope Twist

Sanchita [Pal](#), [Emilia Kilpua](#), [Simon Good](#), [Jens Pomoell](#), [Daniel J. Price](#)

A&A 2021

<https://arxiv.org/pdf/2104.03569.pdf>

Synoptic solar observations of the Solar Flare Telescope focusing on space weather

[Yoichiro Hanaoka](#), [Takashi Sakurai](#), [Ken'ichi Otsuji](#), [Isao Suzuki](#), [Satoshi Morita](#)

Journal of Space Weather and Space Climate 2020

<https://arxiv.org/pdf/2007.14054.pdf>

Properties and magnetic origins of solar S-bursts

Brendan P. [Clarke](#), [Diana E. Morosan](#), [Peter T. Gallagher](#), [Vladimir V. Dorovskyy](#), [Alexander A. Konovalenko](#), [Eoin P. Carley](#)

A&A 2019

<https://arxiv.org/pdf/1901.07424.pdf>

Characteristics of type III radio bursts and solar S bursts

D. E. [Morosan](#), [P. T. Gallagher](#)

Planetary Radio Emissions VIII, Austrian Academy of Sciences Press, Vienna, 357-368, **2017**

<https://arxiv.org/pdf/1802.10460.pdf>

Coronal mass ejections and their sheath regions in interplanetary space

Review

Emilia [Kilpua](#), Hannu E. J. Koskinen & Tuija I. Pulkkinen

Living Reviews in Solar Physics December **2017**, 14:5 **File**

<https://link.springer.com/content/pdf/10.1007%2Fs41116-017-0009-6.pdf>

Forward modeling of coronal mass ejection flux ropes in the inner heliosphere with 3DCORE

Christian [Möstl](#), [Tanja Amerstorfer](#), [Erika Palmerio](#), [Alexey Isavnin](#), [Charles J. Farrugia](#), [Chris Lowder](#), [Reka M. Winslow](#), [Julia Donnerer](#), [Emilia K. J. Kilpua](#), [Peter D. Boakes](#)

Space Weather **2017**

<https://arxiv.org/ftp/arxiv/papers/1710/1710.00587.pdf>

The Association of a J-burst with a Solar Jet

D. E. [Morosan](#), P. T. Gallagher, R. A. Fallows, [H. Reid](#), [G. Mann](#), [M. M. Bisi](#), [J. Magdalenic](#),

A&A **2017**

<https://arxiv.org/pdf/1707.03428.pdf>

LOFAR tied-array imaging and spectroscopy of solar S bursts

D. E. [Morosan](#), P. T. Gallagher, P. Zucca, A. O'Flannagain, R. Fallows, H. Reid, J. Magdalenic, G. Mann, M. M. Bisi, A. Kerdraon, A. A. Konovalenko, A. L. MacKinnon, H. O. Rucker, B. Thide, C. Vocks, A. Alexov, J. Anderson, A. Asgekar, I. M. Avruch, M. J. Bentum, G. Bernardi, A. Bonafede, F. Breitling, J. W. Broderick, W. N. Brouw, H. R. Butcher, B. Ciardi, E. de Geus, J. Eisloffel, H. Falcke, W. Frieswijk, M. A. Garrett, J. Griessmeier, A. W. Gunst, J. W. T. Hessels, M. Hoeft, A. Karastergiou, V. I. Kondratiev, G. Kuper, J. van Leeuwen, D. McKay-Bukowski, J. P. McKean, H. Munk, E. Orru, H. Paas, R. Pizzo, A. G. Polatidis, A. M. M. Scaife, J. Sluman, C. Tasse, M. C. Toribio, R. Vermeulen, P. Zarka

A&A **2015**

<http://arxiv.org/pdf/1507.07496v1.pdf>

9-10 July – **форбуш и затем геомагнитная буря, Dst~-53 нТл**

A Semi-empirical Approach to the Dynamic Coupling of CMEs and Solar Wind

P. [Romero-Corona](#)^{1,2,3}, J. J. González-Avilés^{1,2,3}, and P. Riley⁴

2022 ApJ 937 24

<https://iopscience.iop.org/article/10.3847/1538-4357/ac8b03/pdf>

Forward modeling of coronal mass ejection flux ropes in the inner heliosphere with 3DCORE

Christian [Möstl](#), [Tanja Amerstorfer](#), [Erika Palmerio](#), [Alexey Isavnin](#), [Charles J. Farrugia](#), [Chris Lowder](#), [Reka M. Winslow](#), [Julia Donnerer](#), [Emilia K. J. Kilpua](#), [Peter D. Boakes](#)

Space Weather **2017**

<https://arxiv.org/ftp/arxiv/papers/1710/1710.00587.pdf>

9-13 July

Comparison between the magnetic properties of magnetic clouds and those of associated coronal flux ropes

Sanchita [Pal](#)

VarSITI Newsletter Vol. 21 p.11-13, **2019**

http://newsserver.stil.bas.bg/varsviti/newsL/VarSITI_Newsletter_Vol21.pdf

11-14 July

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

Bin [Zhuang](#)¹, Noé [Lugaz](#)¹, 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>

Heliospheric Evolution of Magnetic Clouds

Bojan [Vršnak](#), [Tanja Amerstorfer](#), [Mateja Dumbović](#), [Martin Leitner](#), [Astrid M. Veronig](#), [Manuela Temmer](#), [Christian Möstl](#), [Ute V. Amerstorfer](#), [Charles J. Farrugia](#), [Antoinette B. Galvin](#)

ApJ 2019

<https://arxiv.org/pdf/1904.08266.pdf>

sci-hub.se/10.3847/1538-4357/ab190a

12 July

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

12-14 July

Statistical Plasma Properties of the Planar and Nonplanar ICME Magnetic Clouds during Solar Cycles 23 and 24

Zubair I. [Shaikh](#)¹ and Anil N. Raghav²

2022 ApJ 938 146

<https://iopscience.iop.org/article/10.3847/1538-4357/ac8f2b/pdf>

The effect of stream interaction regions on ICME structures observed in longitudinal conjunction

Reka M. [Winslow](#), [Camilla Scolini](#), [Noé Lugaz](#), [Antoinette B. Galvin](#)

ApJ 2021

<https://arxiv.org/pdf/2105.10602.pdf>

13 July

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

13-15 July – Сначала фобус, а потом A geomagnetic storm is in progress. Dst~-82 нТл. The cause of the disturbance is a CME that swept past Earth on July 13th.

Uncovering Erosion Effects on Magnetic Flux Rope Twist

Sanchita [Pal](#), [Emilia Kilpua](#), [Simon Good](#), [Jens Pomoell](#), [Daniel J. Price](#)

A&A 2021

<https://arxiv.org/pdf/2104.03569.pdf>

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

14 July

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>

15 July - a long duration C3 event peaking near 03:40 UT, Region 11791 [S14E22], CME

Filament Eruption and Its Reformation Caused by Emerging Magnetic Flux

Bo **Yang**, [Huadong Chen](#)

ApJ 2019

<https://arxiv.org/pdf/1903.01235.pdf>

The chromosphere above a δ -sunspot in the presence of fan-shaped jets

Carolina **Robustini**, [Jorrit Leenaarts](#), [Jaime de la Cruz Rodríguez](#)

A&A 2017

<https://arxiv.org/pdf/1709.03864.pdf>

15-17 Jul

Statistical Plasma Properties of the Planar and Nonplanar ICME Magnetic Clouds during Solar Cycles 23 and 24

Zubair I. **Shaikh**¹ and Anil N. Raghav²

2022 ApJ 938 146

<https://iopscience.iop.org/article/10.3847/1538-4357/ac8f2b/pdf>

17 July

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>

18 July

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>

19 July

Evidence for two-loop interaction from IRIS and SDO observations of penumbral brightenings

C. E. **Alissandrakis**, A. Koukras, S. Patsourakos, A. Nindos

A&A 2017

<https://arxiv.org/pdf/1704.07344.pdf>

Inference of the chromospheric magnetic field orientation in the Ca II 8542 Å line fibrils

A. Asensio **Ramos** (1,2), J. de la Cruz Rodríguez (3), M. J. Martínez González (1,2), H. Socas-Navarro

A&A 2017

<https://arxiv.org/pdf/1612.06088v1.pdf>

20 July

X-ray and EUV Observations of Simultaneous Short and Long Period Oscillations in Hot Coronal Arcade Loops

Pankaj **Kumar**, Valery M. Nakariakov, Kyung-Suk Cho

ApJ 2015

<http://arxiv.org/pdf/1502.07117v1.pdf>

21 July

Simulations of Solar Jets Confined by Coronal Loops

P. F. **Wyper**, C. R. DeVore

ApJ **2015**

<http://arxiv.org/pdf/1509.07901v1.pdf>

Homologous Helical Jets: Observations by IRIS, SDO and Hinode and Magnetic Modeling with Data-Driven Simulations

Mark C. M. **Cheung**, B. De Pontieu, [T. D. Tarbell](#), [Y. Fu](#), [H. Tian](#), [P. Testa](#), [K. K. Reeves](#), [J. Martinez-Sykora](#), [P. Boerner](#), [J. P. Wuelser](#), [J. Lemen](#), [A. M. Title](#), [N. Hurlburt](#), [L. Kleint](#), [C. Kankelborg](#), [S. Jaeggli](#), [L. Golub](#), [S. McKillop](#), [S. Saar](#), [M. Carlsson](#), [V. Hansteen](#)

ApJ, **2015**

<http://arxiv.org/pdf/1501.01593v1.pdf>

22 July

Diagnostic potential of the Ca II 8542A line for solar filaments

C. J. Díaz **Baso**, [M. J. Martínez González](#), [A. Asensio Ramos](#), [J. de la Cruz Rodríguez](#)

A&A **2019**

<https://arxiv.org/pdf/1902.06574.pdf>

Magnetic field variations associated with umbral flashes and penumbral waves

Jayant **Joshi**, [Jaime de la Cruz Rodríguez](#)

A&A **2018**

<https://arxiv.org/pdf/1803.01737.pdf>

Inference of the chromospheric magnetic field orientation in the Ca II 8542 A line fibrils

A. Asensio **Ramos** (1,2), J. de la Cruz Rodríguez (3), M. J. Martínez González (1,2), H. Socas-Navarro

A&A **2017**

<https://arxiv.org/pdf/1612.06088v1.pdf>

24-25 July

A Small-scale Oscillatory Reconnection and the Associated Formation and Disappearance of a Solar Flux Rope

Zhike **Xue**^{1,2,3}, Xiaoli Yan^{1,3}, Chunlan Jin², Liheng Yang^{1,3}, Jincheng Wang^{1,3}, Qiaoling Li^{1,3,4}, and Li Zhao

2019 ApJL 874 L27

[sci-hub.se/10.3847/2041-8213/ab1135](https://arxiv.org/pdf/1902.06574.pdf)

25 July

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>

26 July

³He-Rich Solar Energetic Particle Events with No Measurable ⁴He Intensity Increases

George C. **Ho**, Glenn M. Mason, Robert C. Allen

[Solar Physics](#) February **2019**, 294:33

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1420-z.pdf>

sci-hub.tw/10.1007/s11207-019-1420-z

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>

29 July

A three-dimensional view of the thermal structure in a super-penumbral canopy

C. **Beck**, D. Prasad Choudhary, R. Rezaei

ApJ, 2014

<http://arxiv.org/pdf/1405.1473v1.pdf>

30 July

³He-Rich Solar Energetic Particle Events with No Measurable ⁴He Intensity Increases

George C. **Ho**, Glenn M. Mason, Robert C. Allen

Solar Physics February 2019, 294:33

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1420-z.pdf>

sci-hub.tw/10.1007/s11207-019-1420-z

1 Aug

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>

3 Aug

Magnetic Coupling of the Solar Hemispheres During the Solar Cycle

V. N. Obridko, **V. G. Fainshtein**, **Y. S. Zagainova** & **G. V. Rudenko**

Solar Physics volume 295, Article number: 149 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01716-x.pdf>

Magnetic Properties and Flow Angle of the Inverse Evershed Flow at Its Downflow Points

C. **Beck**, **D.P. Choudhary**

ApJ 2019

<https://arxiv.org/pdf/1902.04660.pdf>

Thermodynamic Properties of the Inverse Evershed Flow at Its Downflow Points

D. P. **Choudhary**¹ and C. Beck

2018 ApJ 859 139

<http://iopscience.iop.org/article/10.3847/1538-4357/aabf36/pdf>

<https://arxiv.org/pdf/1804.07326.pdf>

4 Aug

What causes the high apparent speeds in chromospheric and transition region spicules on the Sun?

Bart **De Pontieu**, **Juan Martinez-Sykora**, **Georgios Chintzoglou**

ApJL 2017

<https://arxiv.org/pdf/1710.06803.pdf>

4-5 Aug – **форбуш и затем** геомагнитная буря **Dst~-45 нТл от корональной дыры**

6-7 Aug - a flurry of erupting magnetic EN and SW filaments

6-12 Aug

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>

7 Aug

Multi-wavelength high-resolution observations of a small-scale emerging magnetic flux event and the chromospheric and coronal response

Santiago Vargas [Dominguez](#), Alexander Kosovichev, Vasyl Yurchyshyn

2014

<http://arxiv.org/pdf/1405.3550v1.pdf>

8 Aug - erupting magnetic SW filament

LOFAR observations of the quiet solar corona

C. [Vocks](#), [G. Mann](#), [F. Breitling](#), [M. M. Bisi](#), [B. Dabrowski](#), [R. Fallows](#), [P. T. Gallagher](#), [A. Krankowski](#), [J. Magdalenic](#), [C. Marque](#), [D. Morosan](#), [H. Rucker](#)

A&A 2018

<https://arxiv.org/pdf/1803.00453.pdf>

10 Aug

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>

10-12 Aug

Structure, Stability, and Evolution of Magnetic Flux Ropes from the Perspective of Magnetic Twist

Rui [Liu](#)¹, Bernhard Kliem², Viacheslav S. Titov³, Jun Chen¹, Yuming Wang¹, Haimin Wang^{4,5}, Chang Liu^{4,5}, Yan Xu^{4,5}, & Thomas Wiegelmann

HMI Science Nuggets #49 April 2016

<http://hmi.stanford.edu/hminuggets/?p=1397>

Structure, Stability, and Evolution of Magnetic Flux Ropes from the Perspective of Magnetic Twist

Rui [Liu](#), Bernhard Kliem, Viacheslav S. Titov, [Jun Chen](#), [Yuming Wang](#), [Haimin Wang](#), [Chang Liu](#), [Yan Xu](#), [Thomas Wiegelmann](#)

ApJ 2015

<http://arxiv.org/pdf/1512.02338v1.pdf>

11 Aug - C5+ flares: C6.7 at 21:31 and C8.4 at 21:58 UTC.

High Resolution Observations of Solar Flares

Haimin [Wang](#)

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

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

Signatures of Magnetic Flux Ropes in the Low Solar Atmosphere Observed in High Resolution

Review

Haimin [Wang](#) and Chang Liu

Front. Astron. Space Sci., 04 April 2019

sci-hub.se/10.3389/fspas.2019.00018

<https://www.frontiersin.org/articles/10.3389/fspas.2019.00018/full>

Witnessing magnetic twist with high-resolution observation from the 1.6-m New Solar Telescope

Haimin [Wang](#), Wenda Cao, Chang Liu, Yan Xu, Rui Liu, Zhicheng Zeng, Jongchul Chae and Haisheng Ji

Nature Communications, 6, 7008, 2015

<http://www.nature.com/ncomms/2015/150428/ncomms8008/pdf/ncomms8008.pdf>

12 Aug

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>

Properties and Energetics of Magnetic Reconnection: I. Evolution of Flare Ribbons

[Jiong Qiu](#), [Jianxia Cheng](#)

Solar Phys. 2022

<https://arxiv.org/pdf/2205.03004.pdf>

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

[Jiong Qiu](#)

ApJ 2021

<https://arxiv.org/pdf/2101.11069.pdf>

13 Aug

Observations and modeling of the onset of fast reconnection in the solar transition region

[L.-J. Guo](#), [B. De Pontieu](#), [Y.-M. Huang](#), [H. Peter](#), [A. Bhattacharjee](#)

ApJ 2020

<https://arxiv.org/pdf/2009.11475.pdf>

14 Aug

Difference of source regions between fast and slow coronal mass ejections

B. [Filippov](#)

PASAustralia 2019

<https://arxiv.org/pdf/1904.04060.pdf>

PRE-ERUPTION OSCILLATIONS IN THIN AND LONG FEATURES IN A QUIESCENT FILAMENT

Anand D. **Joshi**^{1,2}, Yoichiro Hanaoka¹, Yoshinori Suematsu¹, Satoshi Morita¹, Vasyl Yurchyshyn^{2,3}, and Kyung-Suk Cho
2016 ApJ 833 243
<http://sci-hub.cc/doi/10.3847/1538-4357/833/2/243>

15 Aug

High Resolution Observations of Solar Flares

Haimin **Wang**

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

Fine structure of flare ribbons and evolution of electric currents

I.N. **Sharykin**, A.G. Kosovichev

2014

<http://arxiv.org/pdf/1404.5104v1.pdf>

16 Aug

Difference of source regions between fast and slow coronal mass ejections

B. **Filippov**

PASAustralia 2019

<https://arxiv.org/pdf/1904.04060.pdf>

16-18 Aug – быстрый солнечный ветер ranged between 552 and 752 km/s from a large CH579, а геомагнитное возмущение слабое (из-за слабого поля).

17 Aug

- ~01 UT: серьезная EW эрупция волокна, large возмущения, CME
- AR1818 (S07W30) erupted at 1824 UT, producing a LDE M3/2B-class flare.
Выброс 304 А, корональная волна, An asymmetric full halo CME; очень слабые протоны при слабых микроволнах.

Sunspot shearing and sudden retraction motion associated with the 2013 August 17 M3.3 Flare

[Yanjie Zhang](#), [Zhe Xu](#), [Qingmin Zhang](#), [Jun Dai](#), [Haisheng Ji](#)

ApJ 2022

<https://arxiv.org/pdf/2206.09156.pdf>

He I 10830 Å Dimming During Solar Flares, I: The Crucial Role of Non-Thermal Collisional Ionisations

Graham S. **Kerr**, [Yan Xu](#), [Joel C. Allred](#), [Vanessa Polito](#), [Viacheslav M. Sadykov](#), [Nengyi Huang](#), [Haimin Wang](#)

ApJ 2021

<https://arxiv.org/pdf/2103.16686.pdf>

High Resolution Observations of Solar Flares

Haimin **Wang**

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

Comparison of Enhanced Absorption in He I 10830 Å in Observations and Modeling During the Early Phase of a Solar Flare

[Nengyi Huang](#), [Viacheslav M. Sadykov](#), [Yan Xu](#), [Ju Jing](#), [Haimin Wang](#)

ApJ 2020

Development and Parameters of a Non-Self-Similar CME Caused by Eruption of a Quiescent Prominence

I.V. [Kuzmenko](#) (1), [V.V. Grechnev](#)

Solar Phys. 2017

<https://arxiv.org/pdf/1709.01226.pdf> File

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>

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

Ultra-narrow Negative Flare Front Observed in Helium-10830-Å using the 1.6 m New Solar Telescope

Yan [Xu](#), Wenda Cao, Mingde Ding, Lucia Kleint, Jiangtao Su, Chang Liu, Haisheng Ji, Jongchul Chae, Ju Jing, Kyuhyoun Cho, Kyungsuk Cho, Dale Gary, Haimin Wang

2016

<http://arxiv.org/pdf/1601.04729v1.pdf>

17-20 Aug

Filament Activation in Response to Magnetic Flux Emergence and Cancellation in Filament Channels

Ting [Li](#), Jun Zhang, Haisheng Ji

Solar Phys. 2015

<http://arxiv.org/pdf/1504.01109v1.pdf>

18 Aug

Predicting the Evolution of Photospheric Magnetic Field in Solar Active Regions Using Deep Learning

[Liang Bai](#), [Yi Bi](#), [Bo Yang](#), [Jun-Chao Hong](#), [Zhe Xu](#), [Zhen-Hong Shang](#), [Hui Liu](#), [Hai-Sheng Ji](#), [Kai-Fan Ji](#)

Research in Astron. Astrophys. (RAA) 2020

<https://arxiv.org/pdf/2012.03584.pdf>

Spectral Structures of Type II Solar Radio Bursts and Solar Energetic Particles

Kazumasa [Iwai](#), [Seiji Yashiro](#), [Nariaki V. Nitta](#), [Yuki Kubo](#)

ApJ 2019

<https://arxiv.org/ftp/arxiv/papers/1911/1911.05897.pdf>

19 Aug SEP

Evidence of a complex structure within the 2013 August 19 coronal mass ejection Radial and longitudinal evolution in the inner heliosphere*

L. [Rodríguez-García](#)¹, T. Nieves-Chinchilla², R. Gómez-Herrero¹, I. Zouganelis³, A. Vourlidas⁴, L. A. Balmaceda^{2,5}, M. Dumbović⁶, L. K. Jian², L. Mays², F. Carcaboso^{1,2,7}, L. F. G. dos Santos⁸ and J. Rodríguez-Pacheco¹

A&A 662, A45 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/06/aa42966-21.pdf>
<https://arxiv.org/pdf/2203.02713.pdf>

The unusual widespread solar energetic particle event on 2013 August 19. Solar origin and particle longitudinal distribution

L. Rodríguez-García, R. Gómez-Herrero, I. Zouganelis, L. Balmaceda, T. Nieves-Chinchilla, N. Dresing, M. Dumbovic, N. V. Nitta, F. Carcaboso, L.F.G. dos Santos, L. K. Jian, L. Mays, D. Williams, J. Rodríguez-Pacheco

A&A 2021

<https://arxiv.org/pdf/2107.10257.pdf>

19-20 Aug

Solar energetic electron events measured by MESSENGER and Solar Orbiter. Peak intensity and energy spectrum radial dependences: statistical analysis

L. Rodríguez-García, R. Gómez-Herrero, N. Dresing, D. Lario, I. Zouganelis, L. A. Balmaceda, A. Kouloumvakos, A. Fedeli, F. Espinosa Lara, I. Cernuda, G. C. Ho, R. F. Wimmer-Schweingruber, J. Rodríguez-Pacheco

A&A 2022

<https://arxiv.org/pdf/2211.11054.pdf>

20 Aug - >03 UT: эрупция большого южного волокна, 304 А; LDE C1.3; крупный CME после 08 UT; слабые мягкие протоны
A backside full halo CME was observed early in the day.

See 19 Aug

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>

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 Filament Eruptions as Precursors to Flare–CME Events: Establishing the Temporal Connection

Suvadip Sinha¹, Nandita Srivastava^{1,2}, and Dibyendu Nandy^{1,3}

2019 ApJ 880 84

[sci-hub.se/10.3847/1538-4357/ab2239](https://arxiv.org/abs/10.3847/1538-4357/ab2239)

21 Aug

Signatures of running penumbral waves in sunspot photospheres

Johannes Löhner-Böttcher, Nazaret Bello González

2015

<http://arxiv.org/pdf/1503.09106v1.pdf>

24 Aug – заметный форбуш без бури – северное поле Bz

27 Aug – буря (Dst~-53)

29 Aug - a **large magnetic filament** in the sun's southern hemisphere **erupted** during the early hours; CME

30 Aug - LDE C8.3 [N11E43] event peaked at 02:46 associated with a full halo CME in STEREO.

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>

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

[Jiong Qiu](#)
ApJ 2021
<https://arxiv.org/pdf/2101.11069.pdf>

Detection of supersonic downflows and associated heating events in the transition region above sunspots

L. [Kleint](#), P. Antolin, H. Tian, P. Judge, P. Testa, B. De Pontieu, J. Martínez-Sykora, K. K. Reeves, J. P. Wuelser, S. McKillop, S. Saar, M. Carlsson, P. Boerner, N. Hurlburt, J. Lemen, T. D. Tarbell, A. Title, L. Golub, V. Hansteen, S. Jaeggli, C. Kankelborg
ApJL, 2014
<http://arxiv.org/pdf/1406.6816v1.pdf>

31 Aug

Power-law energy distributions of small-scale impulsive events on the active Sun: Results from IRIS

[Nived Vilangot Nhalil](#), [Chris J. Nelson](#), [Mihalis Mathioudakis](#), [J. Gerry Doyle](#), [Gavin Ramsay](#)
MNRAS 2020
<https://arxiv.org/pdf/2009.03123.pdf>

Oscillations in a sunspot with light bridges

Ding [Yuan](#), Valery M. Nakariakov, Zhenghua Huang, Bo Li, Jiangtao Su, Yihua Yan, Baolin Tan
2014
<http://arxiv.org/pdf/1407.1544v1.pdf>

2 Sept

A Steady-state Supersonic Downflow in the Transition Region above a Sunspot Umbra

Thomas [Straus](#), Bernhard Fleck, Vincenzo Andretta
A&A 2015
<http://arxiv.org/pdf/1507.04279v1.pdf>

Dynamics in Sunspot Umbra as Seen in New Solar Telescope and Interface Region Imaging Spectrograph Data

Vasyl [Yurchyshyn](#), Valentyna Abramenko, Ali Kilcik
2014
<http://arxiv.org/pdf/1411.0192v1.pdf>

High-resolution Observations of the Shock Wave Behavior for Sunspot Oscillations with the Interface Region Imaging Spectrograph

H. **Tian**, E. DeLuca, K. K. Reeves, S. McKillop, B. De Pontieu, J. Martínez-Sykora, M. Carlsson, V. Hansteen, L. Kleint, M. Cheung, L. Golub, S. Saar, P. Testa, M. Weber, J. Lemen, A. Title, P. Boerner, N. Hurlburt, T. D. Tarbell, J. P. Wuelser, C. Kankelborg, S. Jaeggli, S. W. McIntosh
Astrophysical Journal, 786:137, **2014**
<http://arxiv.org/pdf/1404.6291v1.pdf>

2-3 Sep

Study of the spatial association between an active region jet and a nonthermal type III radio burst★

Sargam M. **Mulay**^{1,2}, Rohit Sharma³, Gherardo Valori⁴, Alberto M. Vásquez⁵, Giulio Del Zanna², Helen Mason² and Divya Oberoi⁶
A&A 632, A108 (**2019**)
<https://doi.org/10.1051/0004-6361/201936369>
<https://sci-hub.st/10.1051/0004-6361/201936369>

3 Sept – заметный форбуш без бури – северное поле **Bz**

Statistical Analysis of the Relation between Coronal Mass Ejections and Solar Energetic Particles

[Kosuke Kihara](#), [Yuwei Huang](#), [Nobuhiko Nishimura](#), [Nariaki V. Nitta](#), [Seiji Yashiro](#), [Kiyoshi Ichimoto](#), [Ayumi Asai](#)
ApJ **2020**
<https://arxiv.org/pdf/2007.08062.pdf>

Study of the spatial association between an active region jet and a nonthermal type III radio burst★

Sargam M. **Mulay**^{1,2}, Rohit Sharma³, Gherardo Valori⁴, Alberto M. Vásquez⁵, Giulio Del Zanna², Helen Mason² and Divya Oberoi⁶
A&A 632, A108 (**2019**)
<https://doi.org/10.1051/0004-6361/201936369>
<https://arxiv.org/pdf/2009.14581.pdf>

Observing the Sun with the Murchison Widefield Array

D. **Oberoi** (1), R. Sharma (1), S. Bhatnagar (2), C. J. Lonsdale (3), L. D. Matthews (3), I. H. Cairns and many others
31st URSI General Assembly and Scientific Symposium, **2014**
<http://arxiv.org/pdf/1403.6250v1.pdf>

6 September

Ellerman bombs at high resolution III. Simultaneous observations with IRIS and SST

Gregal J. M. **Vissers**, Luc H. M. Rouppe van der Voort, [Robert J. Rutten](#), [Mats Carlsson](#), [Bart De Pontieu](#)
ApJ **2015**
<http://arxiv.org/pdf/1507.00435v1.pdf>

10-27 September

Heating signatures in the disk counterparts of solar spicules in IRIS observations

L. Rouppe **van der Voort**, B. De Pontieu, T.M.D. Pereira, M. Carlsson, V. Hansteen
ApJL, **2015**
<http://arxiv.org/pdf/1412.4531v1.pdf>

On the prevalence of small-scale twist in the solar chromosphere and transition region

B. **De Pontieu**, L. Rouppe van der Voort, S.W. McIntosh, T.M.D. Pereira, M. Carlsson, V. Hansteen, H. Skogsrud, J. Lemen, A. Title, P. Boerner, N. Hurlburt, T.D. Tarbell, J.P. Wuelser, E.E. De Luca, L. Golub, S. McKillop, K. Reeves, S. Saar, P. Testa, H. Tian, C. Kankelborg, S. Jaeggli, L. Kleint, J. Martinez-Sykora
Science, 2014
<http://arxiv.org/pdf/1410.6862v1.pdf>

11 Sept - a magnetic filament snaking around the sun's southeastern limb rose up and erupted,
see 304 A.

13 Sep

Evolution of the flow field in decaying active regions II. Converging flows at the periphery of naked spots
[Hanna Strecker](#), [Nazaret Bello González](#)
A&A 2022
<https://arxiv.org/pdf/2208.14272.pdf>

Magnetic connections across the chromosphere-corona transition region
[Philip G. Judge](#)
ApJ 2021
<https://arxiv.org/pdf/2104.07753.pdf>

14 September

Magnetic topology of the north solar pole
[A. Pastor Yabar](#), [M. J. Martínez González](#), [M. Collados](#)
A&A 2018
<https://arxiv.org/pdf/1804.09075.pdf>

Oscillation of Newly Formed Loops After Magnetic Reconnection in the Solar Chromosphere
Shuhong **Yang**, Yongyuan Xiang
ApJL 2016
<http://arxiv.org/pdf/1602.06370v1.pdf>

A solar tornado observed by EIS: Plasma diagnostics
Peter **Levens**, [Nicolas Labrosse](#), [Lyndsay Fletcher](#), [Brigitte Schmieder](#)
A&A 2015
<http://arxiv.org/pdf/1508.01377v1.pdf>

Solar Magnetized "Tornadoes": Evidence for Rotational Motion in a Tornado-like Prominence
Yang **Su**, Peter G?m?ry, Astrid Veronig, Manuela Temmer, Tongjiang Wang, Kamalam Vanninathan, Weiqun Gan, Youping Li
E-print, Dec 2013; ApJL
<http://arxiv.org/pdf/1312.5226v1.pdf>

17 Sept

Polarimetric Reconstruction of Coronal Mass Ejections from LASCO-C2 Observations
O. **Floyd**, P. Lamy
[Solar Physics](#) November 2019, 294:168
<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1553-0.pdf>

19 Sept - ~03 UT: небольшая эрупция, но с корональной волной

20 September

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>

21 Sept

THREE-DIMENSIONAL GEOMETRY OF A CURRENT SHEET IN THE HIGH SOLAR CORONA: EVIDENCE FOR RECONNECTION IN THE LATE STAGE OF THE CORONAL MASS EJECTIONS

Ryun-Young [Kwon](#)^{1,2}, Angelos Vourlidas², and David Webb

2016 ApJ 826 94

21-22 September

Evidence for a Magnetic Reconnection Origin of Plasma Outflows along Post-CME Rays

Jongchul [Chae](#)¹, Kyuhyun Cho¹, Ryun-Young Kwon^{2,3}, and Eun-Kyung Lim

2017 ApJ 841 49

<http://sci-hub.cc/10.3847/1538-4357/aa6d7a>

22 September

Internetwork chromospheric bright grains observed with IRIS

Juan [Martínez-Sykora](#), Luc Rouppe van der Voort, Mats Carlsson et al.

ApJ, 2015

<http://arxiv.org/pdf/1502.03490v1.pdf>

Statistical Evidence for the Existence of Alfvénic Turbulence in Solar Coronal Loops

Jiajia [Liu](#), Scott W. McIntosh, Ineke De Moortel, James Threlfall, Christian Bethge

2014

<http://arxiv.org/pdf/1411.5094v1.pdf>

23 Sept

Difference of source regions between fast and slow coronal mass ejections

B. [Filippov](#)

PASAustralia 2019

<https://arxiv.org/pdf/1904.04060.pdf>

24 Sept - A filament of magnetism curling over the sun's northeastern limb erupted around 20:30

Detection of decayless oscillations in solar transition region loops L4

Yuhang [Gao](#), Zhenyong Hou, Tom Van Doorsselaere and Mingzhe Guo

A&A Letter Volume 681, January 2024

<https://doi.org/10.1051/0004-6361/202348702>

<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

The Structure of Solar Coronal Mass Ejections in the Extreme-Ultraviolet Passbands

H. Q. [Song](#), [J. Zhang](#), [L. P. Li](#), [Y. D. Liu](#), [B. Zhu](#), [B. Wang](#), [R. S. Zheng](#), [Y. Chen](#)

ApJ 2019

<https://arxiv.org/pdf/1910.09735.pdf>

Investigation of a confined C-class flare in an arch filament system close to a regular sunspot

Rohan Eugene **Louis**

JGR **2019**

<https://arxiv.org/pdf/1910.05926.pdf>

Plasma injection into a solar coronal loop

Leping **Li**, **Hardi Peter**

A&A **2019**

<https://arxiv.org/pdf/1905.07800.pdf>

Exploration of long-period oscillations in an H α prominence

M. **Zapiór**, **B. Schmieder**, **P. Mein**, **N. Mein**, **N. Labrosse**, **M. Luna**

A&A **2019**

<https://arxiv.org/pdf/1903.00230.pdf>

Solar Ultraviolet Bursts

Review

Peter R. **Young**, Hui Tian, Hardi Peter, Robert J. Rutten, Chris J. Nelson, Zhenghua Huang,

Space Science Reviews December **2018**, 214:120

<https://link.springer.com/content/pdf/10.1007%2Fs11214-018-0551-0.pdf>

Magnetic Field and Plasma Diagnostics from Coordinated Prominence Observations

B. **Schmieder**,¹ P. Levens,² K. Dalmasse,³ N. Mein,¹ P. Mein,¹ A. Lopez-Ariste,⁴ N. Labrosse,² and P. Heinzel⁵

Ground-based Solar Observations in the Space Instrumentation Era

ASP Conference Series, Vol. 504, p. 119, **2016**

<http://aspbooks.org/publications/504/119.pdf>

Observational Evidence of Magnetic Reconnection for Brightenings and Transition Region Arcades in IRIS observations

Jie **Zhao**, Brigitte Schmieder, Hui Li, Etienne Pariat, Xiaoshuai Zhu, Li Feng, Michalina Grubecka

ApJ **2017**

<https://arxiv.org/pdf/1701.08356v1.pdf>

Halpalpha Doppler shifts in a tornado in the solar corona

B. **Schmieder**, P. Mein, N. Mein, P. J. Levens, N. Labrosse, L. Ofman

A&A **2016**

<https://arxiv.org/pdf/1612.02232v1.pdf>

Heating and cooling of coronal loops observed by SDO

Li, L. P., Peter, H., Chen, F., and Zhang, J.

A&A, **2015**

E-print, Sept 2015

<http://ddl.escience.cn/f/sHZh>

Understanding the Mg II and H α Spectra in a Highly Dynamical Solar Prominence

P. **Heinzel**¹, B. Schmieder², N. Mein², and S. Gunár

2015 ApJ 800 L13

Open questions on prominences from coordinated observations by IRIS, Hinode, SDO/AIA, THEMIS, and the Meudon/MSDP

Brigitte **Schmieder**, Hui Tian, Arturo Lopez Ariste, Nicole Mein, Pierre Mein, Kevin Dalmasse, Leon Golub

A&A, **2014**

<http://arxiv.org/pdf/1407.3171v1.pdf>

25-26 September

Detection of decayless oscillations in solar transition region loops L4

Yuhang **Gao**, Zhenyong Hou, Tom Van Doorselaere and Mingzhe Guo

A&A Letter Volume 681, January 2024

<https://doi.org/10.1051/0004-6361/202348702>

<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

Emergence of granular-sized magnetic bubbles through the solar atmosphere. III. The path to the transition region

Ada **Ortiz**, Viggo Hansteen, Luis Ramon Bellot Rubio, [Jaime de la Cruz Rodriguez](#), [Bart De Pontieu](#), [Mats Carlsson](#), [Luc Roupe van der Voort](#)

ApJ 2016

<http://arxiv.org/pdf/1604.00302v1.pdf>

26-30 Sep

Three-day Forecasting of Solar Wind Speed Using SDO/AIA Extreme-ultraviolet Images by a Deep-learning Model

Jihyeon Son¹, Suk-Kyung Sung², Yong-Jae Moon^{1,2}, Harim Lee², and Hyun-Jin Jeong²

2023 ApJS 267 45

<https://iopscience.iop.org/article/10.3847/1538-4365/ace59a/pdf>

27 Sept

On the speed and acceleration of electron beams triggering interplanetary type III radio bursts

Vratislav **Krupar** (1), [Eduard P. Kontar](#) (2), [Jan Soucek](#) (1), [Ondrej Santolik](#) (1 and 3), [Milan Maksimovic](#) (4), [Oksana Kruparova](#)

2015

<http://arxiv.org/pdf/1507.06874v1.pdf>

Conversion from mutual helicity to self-helicity observed with IRIS

Leping **Li**, Hardi Peter, Feng Chen, Jun Zhang

A&A, 570, A93 2014

<http://arxiv.org/pdf/1410.5597v1.pdf>

28 Sep

Generate Radioheliograph Image from SDO/AIA Data with Machine Learning Method

[PeiJin Zhang](#), [Chuanbing Wang](#), [Guanshan Pu](#)

Research in Astronomy and Astrophysics 2020

<https://arxiv.org/pdf/2006.13023.pdf>

28 Sep-28 Oct

Characterizing extreme geomagnetic storms using Extreme Value Analysis: a discussion on the representativeness of short datasets

G. **Bernoux**, [V. Maget](#)

Space Weather **Volume 18, Issue 6** e2020SW002450 2020

<https://sci-hub.tw/10.1029/2020SW002450>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002450>

29 Sept - >21 h – серьёзная эрупция большого NW волокна, мощная на 304 Å, слабое радио, SEP протоны с медленным нарастанием до 180 pfu; a large filament eruption from near the equator and well into the northwest quadrant between the two coronal holes on the visible disk. This event was recorded as a long duration C1.1 event peaking near 23h UTC and was associated with an increase in proton fluxes and a full halo CME

Multi-Scale Image Preprocessing and Feature Tracking for Remote CME Characterization

[Oleg Stepanyuk](#), [Kamen Kozarev](#), [Mohamed Nedal](#)

Journal of Space Weather and Space Climate 2022

<https://arxiv.org/pdf/2205.15088.pdf>

Ударная волна в солнечном событии, связанном с эрупцией крупного протуберанца
[Кузьменко И.В.1](#) , [Гречнев В.В.2](#)

Тезисы XXV всероссийская ежегодная конференция

«Солнечная и солнечно-земная физика-2021», Пулково, 2021

<http://www.gaoran.ru/russian/solphys/2021/gao2021.pdf>

The Correlation between Energy Spectra and Element Abundances in Solar Energetic Particles

Donald V. [Reames](#)

Solar Phys. 2020

<https://arxiv.org/ftp/arxiv/papers/2008/2008.06985.pdf>

A Geoeffective CME Caused by the Eruption of a Quiescent Prominence on 29 September 2013

V. V. [Grechnev](#) & [I. V. Kuzmenko](#)

[Solar Physics](#) volume 295, Article number: 55 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01619-x.pdf>

CESRA #2584 June 2020 <http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2584>

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>

On the Nature of the Bright Core of Solar Coronal Mass Ejections

H. Q. [Song](#)¹, [J. Zhang](#)², [X. Cheng](#)³, [L. P. Li](#)⁴, [Y. Z. Tang](#)¹, [B. Wang](#)¹, [R. S. Zheng](#)¹, and [Y. Chen](#)¹
2019 ApJ 883 43

<https://iopscience.iop.org/article/10.3847/1538-4357/ab304c/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>

The Disappearing Solar Filament of 2013 September 29 and Its Large Associated Proton Event: Implications for Particle Acceleration at the Sun

E. W. [Cliver](#)¹, [S. W. Kahler](#)², [M. Kazachenko](#)^{1,3,4}, and [M. Shimojo](#)^{5,6}

2019 ApJ 877 11

<sci-hub.si/10.3847/1538-4357/ab0e03>

<https://iopscience.iop.org/article/10.3847/1538-4357/ab0e03/pdf>

Difference of source regions between fast and slow coronal mass ejections

B. [Filippov](#)

PASAustralia 2019

<https://arxiv.org/pdf/1904.04060.pdf>

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>

Modelling of Mg II lines in solar prominences

Peter James **Levens**, [Nicolas Labrosse](#)

A&A **2019**

<https://arxiv.org/pdf/1902.00086.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

Comparison of CME and ICME Structures Derived from Remote-Sensing and In Situ Observations

V. **Bothmer**, N. Mrotzek

[Solar Physics](#) November **2017**, 292:157

<https://link.springer.com/article/10.1007/s11207-017-1171-7>

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>

Flux emergence event underneath a filament

J. **Palacios**, Y. Cerrato, C. Cid, A. Guerrero, E. Saiz

Proceedings of the International Astronomical Union, **2015**, Volume 305 Polarimetry: From the Sun to Stars and Stellar Environments **2017**

<https://arxiv.org/pdf/1704.00681.pdf>

Palacios, J., Cid, C., Guerrero, A., Saiz, E., Cerrato, Y.: 2015, Supergranular-scale magnetic flux emergence beneath an unstable filament. *Astron. Astrophys.* 583, A47. DOI. ADS.

Direct Spatial Association of an X-Ray Flare with the Eruption of a Solar Quiescent Filament

Gordon D. **Holman** & Adi Foord

ApJ **2015**

http://hesperia.gsfc.nasa.gov/~kim/Holman_Foord_2015_quiescent_filament_flare.pdf

Direct Spatial Association of an X-Ray Flare with the Eruption of a Solar Quiescent Filament

Gordon D. **Holman** & Adi Foord

ApJ 804 108 **2015**

http://hesperia.gsfc.nasa.gov/~kim/Holman_Foord_2015_quiescent_filament_flare.pdf

RHESSI Detection of X-ray Emission from a Quiet-Sun Filament Eruption

Gordon **Holman** and Adi Foord

RHESSI Science Nugget No. 250, April **2015**

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

Filament Eruptions Outside of Active Regions as Sources of Large Solar Energetic Particle Events

Kahler, S. ; [Gopalswamy, N.](#) ; [Makela, P.](#) ; [Akiyama, S.](#) ; [Yashiro, S.](#) ; [Xie, H.](#) ; [Thakur, N.](#)
Proceedings of the 34th International Cosmic Ray Conference (ICRC2015). 30 July - 6 August, 2015.
The Hague, The Netherlands. Online at <http://pos.sissa.it/cgi-bin/reader/conf.cgi?confid=236>, id.48 2015
<https://pos.sissa.it/236/048/pdf>

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>

Filament Activation in Response to Magnetic Flux Emergence and Cancellation in Filament Channels

Ting [Li](#), Jun Zhang, Haisheng Ji
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<http://arxiv.org/pdf/1504.01109v1.pdf>

X-ray Flare Associated with a Quiescent Filament Eruption and Coronal Mass Ejection

[Foord](#), Adi; Holman, Gordon D.
American Astronomical Society, AAS Meeting #225, #137.08, 2015
<http://adsabs.harvard.edu/abs/2015AAS...22513708F>

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>

The dynamics of eruptive prominences **Review**

Nat [Gopalswamy](#)
Solar Prominences, edited by J.-C. Vial & O. Engvold, Springer, in press (2014), Chapter 15, File
<http://arxiv.org/pdf/1407.2594v1.pdf>

30 Sept

Predicting well-connected SEP events from observations of solar EUVs and energetic protons

Marlon [Núñez](#)^{1*}, Teresa Nieves-Chinchilla² and Antti Pulkkinen²
J. Space Weather Space Clim. 2019, 9, A27
<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180069.pdf>

Electron Density Reconstruction of Solar Coronal Mass Ejections Based on Genetic Algorithm: Method and Application

Xinghua [Dai](#), [Huaning Wang](#)
ApJ 2019
<https://arxiv.org/pdf/1902.06953.pdf>

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>

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>

1-3 Oct

Predicting the Evolution of Photospheric Magnetic Field in Solar Active Regions Using Deep Learning

[Liang Bai](#), [Yi Bi](#), [Bo Yang](#), [Jun-Chao Hong](#), [Zhe Xu](#), [Zhen-Hong Shang](#), [Hui Liu](#), [Hai-Sheng Ji](#), [Kai-Fan Ji](#)

Research in Astron. Astrophys. (RAA) 2020

<https://arxiv.org/pdf/2012.03584.pdf>

Evolution of Cosmic-Ray Intensities While the Earth Was Engulfed by the Interplanetary Storm (Blob) of 1–3 October 2013

R. P. [Kane](#)

Solar Phys., 2014

2 Oct – Буря Dst ~- 48 nT и форбуш от эрупции 29-ого;
>22 h – эрупция SE волокна

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

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>

Identifying Flux Rope Signatures Using a Deep Neural Network

Luiz F. G. dos [Santos](#), [Ayris Narock](#), [Teresa Nieves-Chinchilla](#), [Marlon Nuñez](#), [Michael Kirk](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2008.13294.pdf>

Geoeffective Properties of Solar Transients and Stream Interaction Regions **Review**

E. K. J. [Kilpua](#), A. Balogh, R. von Steiger, Y. D. Liu

[Space Science Reviews](#) Volume 212, [Issue 3–4](#), pp 1271–1314 2017

<https://link.springer.com/content/pdf/10.1007%2Fs11214-017-0411-3.pdf>

4 Oct

Explosive events on sub-arcsecond scale in IRIS observations: a case study

Zhenghua [Huang](#), Maria S. Madjarska, Lidong Xia, J. G. Doyle, Klaus Galsgaard, Hui Fu
ApJ, 2014

<http://star.arm.ac.uk/preprints/2014/659.pdf>

5 Oct, 06:50 – II тип на нашем спектре, на LEAR и STEREO, крупный CME от приличной восточной залимбовой эрупции, farside

Critical magnetic field strengths for solar coronal plumes in quiet regions and coronal holes?

[Ellis A. Avallone](#), [Sanjiv K. Tiwari](#), [Navdeep K. Tiwari](#), [Ronald L. Moore](#), [Amy Winebarger](#)

ApJ 2018

<https://arxiv.org/pdf/1805.11188.pdf>

7 Oct

Magnetic Coupling of the Solar Hemispheres During the Solar Cycle

[V. N. Obridko](#), [V. G. Fainshtein](#), [Y. S. Zagainova](#) & [G. V. Rudenko](#)

[Solar Physics](#) volume 295, Article number: 149 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01716-x.pdf>

Dynamic Evolution of an X-shaped Structure above a Trans-equatorial Quadrupole Solar Active Region Group

J. Q. [Sun](#), X. Cheng, Y. Guo, M. D. Ding, Y. Li

[ApJL](#), 2014

<http://arxiv.org/pdf/1405.1563v1.pdf>

8 Oct – на протяжении всего дня крупные эрупции **NE** и центрального волокон, **304 A**

An interesting chain of events started at the northeast limb near 08:30 UTC as a filament became active. The activity spread along the filament channel to near the center of the visible disk and then in a southeasterly direction along a filament channel in the southern hemisphere. A filament eruption was observed late in the day

Investigating the Transition Region Explosive Events and Their Relationship to Network Jets

Yajie [Chen](#), [Hui Tian](#), [Zhenghua Huang](#), [Hardi Peter](#), [Tanmoy Samanta](#)

[ApJ](#) 2019

<https://arxiv.org/pdf/1901.11215.pdf>

Space Weather Effects in the Earth's Radiation Belts

Review

D. N. [Baker](#), P. J. Erickson, J. F. Fennell, J. C. Foster, A. N. Jaynes, P. T. Verronen

[Space Science Reviews](#) February 2018, 214:17

<https://link.springer.com/content/pdf/10.1007%2Fs11214-017-0452-7.pdf>

CONSTRAINING THE SOLAR CORONAL MAGNETIC FIELD STRENGTH USING SPLIT-BAND TYPE II RADIO BURST OBSERVATIONS

P. [Kishore](#)¹, R. Ramesh¹, K. Hariharan¹, C. Kathiravan¹, and N. Gopalswamy

2016 [ApJ](#) 832 59

<http://sci-hub.cc/10.3847/0004-637X/832/1/59>

8-9 Oct - Буря **Dst** ~- 65 nT и форбуш от залимбовой эрупции **5-ого (?)**, от небольшой центральной эрупции **6-ого (рановато?)** или от КД (**рановато?**); The source of this unexpected disturbance is likely a faint full halo CME observed on October 6 (from 14:24 UTC in STEREO-A, after 15 UTC in LASCO). An eruption near the central meridian at close to S10 was observed at 13:45 UTC on that day.

Characterizing extreme geomagnetic storms using Extreme Value Analysis: a discussion on the representativeness of short datasets

G. [Bernoux](#), [V. Maget](#)

[Space Weather](#) 2020 e2020SW002450

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002450>

9 Oct – 01:51: **M2.8** вспышка, **пересвет** на STEREO-B, $B=17*2/300=0,11$

9 Oct, 01:48 - **вспышка M2.8** (S23E71), хороший II тип, CME

On the prevalence of small-scale twist in the solar chromosphere and transition region

B. **De Pontieu**, L. Rouppe van der Voort, S.W. McIntosh, T.M.D. Pereira, M. Carlsson, V. Hansteen, H. Skogsrud, J. Lemen, A. Title, P. Boerner, N. Hurlburt, T.D. Tarbell, J.P. Wuelser, E.E. De Luca, L. Golub, S. McKillop, K. Reeves, S. Saar, P. Testa, H. Tian, C. Kankelborg, S. Jaeggli, L. Kleint, J. Martinez-Sykora
Science, 2014
<http://arxiv.org/pdf/1410.6862v1.pdf>

An Interface Region Imaging Spectrograph first view on Solar Spicules

T. M. D. **Pereira**, B. De Pontieu, M. Carlsson, V. Hansteen, T. D. Tarbell, J. Lemen, A. Title, P. Boerner, N. Hurlburt, J. P. Wülser, J. Martínez-Sykora, L. Kleint, L. Golub, S. McKillop, K. K. Reeves, S. Saar, P. Testa, H. Tian, S. Jaeggli, C. Kankelborg
ApJL, 2014
<http://arxiv.org/pdf/1407.6360v1.pdf>

9-13 Oct

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

10 Oct

Limb Event Brightenings (LEBs) with fast ejection using IRIS mission Observations

E. **Tavabi**, S. Koutchmy, L. Golub
Solar Phys. 2015
<http://arxiv.org/ftp/arxiv/papers/1507/1507.06794.pdf>

11 Oct – 07:31: **пересвет** от (за)лимбовой M1.5 вспышки STEREO-B, $B=17*2/284=0,12$

11 Oct - An M1.5/2F flare was recorded at 07:25 UTC, its source was at the northeast limb. A wide CME was associated with the event. Корональная волнаю, II(2) **Ha STEREO-B** хорошо виды петли, уходящие на диск. Много коротких вспышек. **Gamma-flare**

Particle acceleration and their escape into the heliosphere in solar flares with open magnetic field

Mykola Gordovskyy, **Philippa K. Browning**, **Kanya Kusano**, **Satoshi Inoue**, **Gregory E. Vekstein**
ApJ 2023
<https://arxiv.org/pdf/2305.19449.pdf>

Солнечные вспышки с продолжительным гамма-излучением и характеристики потоков протонов высоких энергий.

Томозов В.М., **Минасянц Г.С.**, **Минасянц Т.М.**
СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 9 № 4 , 2023 с. 38–43.
<https://naukaru.ru/ru/storage/viewWindow/138048>

The Crucial Role of Perpendicular Diffusion in the Longitude Distribution of >10 MeV Solar Energetic Protons

Yang **Wang**^{1,2} and Gang Qin^{1,2}
2023 ApJ 954 81
<https://iopscience.iop.org/article/10.3847/1538-4357/ace35b/pdf> File

The coupling of an EUV coronal wave and ion acceleration in a Fermi-LAT behind-the-limb solar flare

Melissa **Pesce-Rollins**, [Nicola Omodei](#), [Sam Krucker](#), [Niccol`o Di Lalla](#), [Wen Wang](#), [Andrea F. Battaglia](#), [Alexander Warmuth](#), [Astrid M. Veronig](#), [Luca Baldini](#)
ApJ **2022**
<https://arxiv.org/pdf/2205.04760.pdf>

Recent Results on the Fine Structure in Cosmic Radio Emission **Book**
Zebra Pattern in Solar and Pulsar Radio Emission

G.P. **Chernov**, V. Fomichev, S. Fainshtein
LAP LAMBERT Academic Publishing **2021** File

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

Особенности развития длительных потоков высокоэнергичного гамма-излучения на разных стадиях солнечных вспышек.

Минасянц Г.С., Минасянц Т.М., Томозов В.М.

СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 5. **2019**. № 3. С. 11–20

<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. Bazilevskaya](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ **2019**

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

Resonant absorption as a damping mechanism for the transverse oscillations of the coronal loops observed by SDO/AIA

Javad **Ganjali**, [Nastaran Farhang](#), [Shahriar Esmaeili](#), [Mohsen Javaherian](#), [Hossein Safari](#)

2019

<https://arxiv.org/pdf/1902.09649.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

Energetic Gamma-Ray Emission from Solar Flares

Ervin **Kafexhiu**¹, Carlo Romoli^{1,2}, Andrew M. Taylor³, and Felix Aharonian

2018 ApJ 864 148

<https://sci-hub.tw/10.3847/1538-4357/aad801>

Implications of loop-top origin for microwave, hard X-ray, and low-energy gamma-ray emissions from behind the limb flares

Vahé **Petrosian**

ApJ **2018**

<https://arxiv.org/pdf/1808.07161.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

Multi-viewpoint Coronal Mass Ejection Catalog Based on STEREO COR2 Observations

Angelos [Vourlidas](#)^{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>

The magnetic connectivity of coronal shocks to the visible solar surface during long-duration γ -ray events

Ilya [Plotnikov](#), Alexis P. Rouillard, Gerald H. Share
A&A 2017
<https://arxiv.org/pdf/1703.07563.pdf> [File](#)

Fermi-LAT Observations of High-energy Behind-the-limb Solar Flares

M. [Ackermann](#)¹, A. Allafort², L. Baldini³, G. Barbiellini^{4,5}, D. Bastieri^{6,7}, R. Bellazzini⁸, E. Bissaldi⁹, R. Bonino^{10,11}, E. Bottacini², J. Bregeon¹²Show full author list
2017 ApJ 835 219
<http://sci-hub.cc/doi/10.3847/1538-4357/835/2/219>

Unexpected spatial intensity distributions and onset timing of solar electron events observed by closely spaced STEREO spacecraft

A. [Klassen](#)¹, N. Dresing¹, R. Gomez-Herrero², B. Heber¹, R. Muller-Mellin¹
A&A 2016
http://www.ieap.uni-kiel.de/et/people/klassen/Klassen_28734.pdf

Automatic Detection of Magnetic delta in Sunspot Groups

Sreejith [Padinhatteeri](#), Paul A. Higgins, D. Shaun Bloomfield, Peter T. Gallagher
Solar Phys. 2015
<http://arxiv.org/pdf/1510.06413v1.pdf>

Fermi Large Area Telescope observations of high-energy gamma-ray emission from behind-the-limb solar flares

Melissa [Pesce-Rollins](#), Nicola Omodei, Vahe' Petrosian, Wei Liu, Fatima Rubio da Costa, Alice Allafort, for the Fermi-LAT Collaboration
The 34th International Cosmic Ray Conference Proceedings 2015
<http://arxiv.org/pdf/1507.04303v1.pdf>

First detection of >100 MeV gamma rays associated with a behind-the-limb solar flare

Melissa [Pesce-Rollins](#), Nicola Omodei, Vahe' Petrosian, Wei Liu, Fatima Rubio da Costa, Alice Allafort, Qingrong Chen
ApJL 2015
<http://arxiv.org/pdf/1505.03480v1.pdf> [File](#)

12 Oct

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>

Eruptions from coronal hole bright points: observations and non-potential modelling

Maria S. [Madjarska](#), [Klaus Galsgaard](#), [Duncan H. Mackay](#), [Kostadinka Koleva](#), [Momchil Dechev](#)
A&A 2020
<https://arxiv.org/pdf/2009.04628.pdf>

Chromospheric magnetic field: A comparison of He I 10830 Å observations with nonlinear force-free field extrapolation

[Yusuke Kawabata](#), [Andrés Asensio Ramos](#), [Satoshi Inoue](#), [Toshifumi Shimizu](#)

ApJ 2020

<https://arxiv.org/pdf/2006.00179.pdf>

Energy origination and triggering mechanism of a series of homologous confined flares

Guorong [Chen](#), [Xiaoli Yan](#)

ApJ 2019

<https://arxiv.org/pdf/1910.09147.pdf>

EUV Emission and Scattered Light Diagnostics of Equatorial Coronal Holes as Seen by Hinode/EIS

Carolyn [Wendeln](#), [Enrico Landi](#)

ApJ 2017

<https://arxiv.org/pdf/1712.03042.pdf>

Fine Structures and Overlying Loops of Confined Solar Flares

Shuhong [Yang](#), Jun Zhang, and Yongyuan Xiang

ApL, 2014

<http://arxiv.org/pdf/1409.0471v1.pdf>

13 Oct – 01:43 – M1.3 flare (S22E17) and eruption, faint type II, partial halo CME

Много коротких вспышек.

07:11-07:23 – type II(1) и у нас виден

Improved AI-generated Solar Farside Magnetograms by STEREO and SDO Data Sets and Their Release

Hyun-Jin [Jeong](#)¹, Yong-Jae Moon^{1,2}, Eunsu Park³, Harim Lee², and Ji-Hye Baek^{3,4}

2022 ApJS 262 50

<https://iopscience.iop.org/article/10.3847/1538-4365/ac8d66/pdf>

On the prevalence of small-scale twist in the solar chromosphere and transition region

B. [De Pontieu](#), L. Rouppe van der Voort, S.W. McIntosh, T.M.D. Pereira, M. Carlsson, V. Hansteen, H. Skogsrud, J. Lemen, A. Title, P. Boerner, N. Hurlburt, T.D. Tarbell, J.P. Wuelser, E.E. De Luca, L. Golub, S. McKillop, K. Reeves, S. Saar, P. Testa, H. Tian, C. Kankelborg, S. Jaeggli, L. Kleint, J. Martinez-Sykora

Science, 2014

<http://arxiv.org/pdf/1410.6862v1.pdf>

13-16 Oct

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>

14 Oct – 13:15 – C8.0 вспышка (S21W01) и небольшая эрупция

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>

15 Oct – 08:38: центральная/южная вспышка M1.8 и **довольно большая эрупция**

Много коротких вспышек. C5+ flares: C9.5 at 05:07, M1.8 at 08:38, C6.5 at 15:36, M1.3 at 23:36.

- слабая буря (**Dst ~-40 nT**) и фобуш under the influence of a high speed stream from CH590.

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

Characterizing extreme geomagnetic storms using Extreme Value Analysis: a discussion on the representativeness of short datasets

G. [Bernoux](#), [V. Maget](#)

Space Weather 2020 e2020SW002450

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002450>

Flare-induced changes of the photospheric magnetic field in a δ -spot deduced from ground-based observations

Peter [Gömöry](#), Horst Balthasar, Christoph Kuckein, Július Koza, Astrid M. Veronig, Sergio J. González Manrique, Aleš Kučera, Pavol Schwartz, Arnold Hanslmeier

A&A 2017

<https://arxiv.org/pdf/1704.06089.pdf>

16 Oct – Короткие вспышки и небольшие эрупции. 09:19-09:29 – II тип слабый

17 Oct – 01:51: M1.2 вспышка, **пересвет** на STEREO-A, $A=18,5*2/312=0,12$

17-18 Oct

Cross-Calibrating Sunspot Magnetic Field Strength Measurements from the McMath–Pierce Solar Telescope and the Dunn Solar Telescope

Fraser T. [Watson](#), Christian Beck, Matthew J. Penn, Alexandra Tritschler...

Solar Phys. 2015

<http://arxiv.org/pdf/1511.07315v1.pdf>

18-20 Oct

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>

Relation of coronal rain originating from coronal condensations to interchange magnetic reconnection

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

ApJ 2020

<https://arxiv.org/pdf/2011.00709.pdf>

19 Oct

Helical motions of fine-structure prominence threads observed by Hinode and IRIS

Takenori J. [Okamoto](#), Wei Liu, Saku Tsuneta

ApJ 2016

<http://arxiv.org/pdf/1608.00123v1.pdf>

Resonant Absorption of Transverse Oscillations and Associated Heating in a Solar Prominence. I- Observational aspects

Takenori J. [Okamoto](#), Patrick Antolin, Bart De Pontieu, [Han Uitenbroek](#), [Tom Van](#)

[Doorselaere](#), [Takaaki Yokoyama](#)

ApJ 2015

<http://arxiv.org/pdf/1506.08965v1.pdf>

20 Oct

Consecutive Narrow and Broad Quasi-periodic Fast-propagating Wave Trains Associated with a Flare

[Xinping Zhou](#), [Yuandeng Shen](#), [Chengrui Zhou](#), [Zehao Tang](#), [Ahmed Ahmed Ibrahim](#)

ScChG 2024

<https://arxiv.org/pdf/2401.06661.pdf>

Statistical study of type III bursts and associated HXR emissions

[James Tomin](#) ; [Vilmer Nicole](#)

Astronomy & Astrophysics, Volume 673, id.A57, 13 pp. 2023

<https://www.aanda.org/articles/aa/pdf/2023/05/aa45825-22.pdf>

Sympathetic Filament Eruptions within a Fan-spine Magnetic System

[Chengrui Zhou](#), [Yuandeng Shen](#), [Xinping Zhou](#), [Zehao Tang](#), [Yadan Duan](#), [Song Tan](#)

ApJ 2021

<https://arxiv.org/pdf/2109.09285.pdf>

Magnetic Flux Cancellation as the Buildup and Trigger Mechanism for CME-Producing Eruptions in two Small Active Regions

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

ApJ 2018

<https://arxiv.org/pdf/1807.03237.pdf>

20-26 Oct

Deep-learning Reconstruction of Sunspot Vector Magnetic Fields for Forecasting Solar Storms

Dattaraj B. [Dhuri](#)^{1,2}, Shamik Bhattacharjee¹, Shravan M. Hanasoge^{1,2}, and Sashi Kiran Mahapatra¹

2022 ApJ 939 64

<https://iopscience.iop.org/article/10.3847/1538-4357/ac9413/pdf>

21 Oct

Sounding Rocket Observations of Active Region Soft X-Ray Spectra Between 0.5 and 2.5 nm Using a Modified SDO/EVE Instrument

Seth [Wieman](#), Thomas Woods, Andrew Jones, Christopher Moore

Solar Phys. 2016

22 Oct : - утро – крупная эрупция крупного центрального-северного волокна, **304 A**, CME направлен к северу; A partial CME was observed early in the day following a filament eruption in the northeast quadrant.

21:20 – очень импульсная M4.2 (N04W01) вспышка, выброс на запад, **304 A**, волна Мортонa (см. <http://www.spaceweather.com/>), II тип? A small halo CME was associated with the M4 event in AR 11875 late in the day.

The diversity of spectral shapes of hydrogen Lyman lines and Mg II lines in a quiescent prominence

P. Schwartz (1), [S. Gunar](#) (2), [J. Koza](#) (1), [P. Heinzel](#) (2, 3) ((1)

A&A 2024

<https://arxiv.org/pdf/2401.09992.pdf>

Statistical Studies on Modified Neupert Effect★

YU Wen-hui a b c, LI You-ping a b, GAN Wei-qun a b

[Chinese Astronomy and Astrophysics Volume 45, Issue 1](#), 2021, Pages 82-98

<https://doi.org/10.1016/j.chinastron.2021.02.006>

<https://www.sciencedirect.com/science/article/abs/pii/S0275106221000060>

<https://sci-hub.ru/10.1016/j.chinastron.2021.02.006>

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>

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>

Plasmoid-mediated reconnection in solar UV bursts

H. [Peter](#), [Y.-M. Huang](#), [L. P. Chitta](#), [P. R. Young](#)

A&A 2019

<https://arxiv.org/pdf/1907.04335.pdf>

СРАВНЕНИЕ ОСОБЕННОСТЕЙ ФОРМИРОВАНИЯ КОРОНАЛЬНЫХ ВЫБРОСОВ МАССЫ, ИМЕЮЩИХ РАЗНУЮ СКОРОСТЬ В ПОЛЕ ЗРЕНИЯ КОРОНГРАФОВ LASCO

[Загайнова](#) Ю.С.1, [Файнштейн](#) В.Г.2, [Мышьяков](#) И.И.2

Астрономия-2018 Том 2 Солнечно-земная физика – современное состояние и перспективы Стр. 82

<http://www.izmiran.ru/library/eaas2018/eaas-2018-2.pdf>

Statistical analysis of UV spectra of a quiescent prominence observed by IRIS

S. [Jejič](#), [P. Schwartz](#), [P. Heinzel](#), [M. Zapiór](#), [S. Gunár](#)

A&A 2018

<https://arxiv.org/pdf/1807.05767.pdf>

22-23 Oct

Solar Ultraviolet Bursts

Review

Peter R. [Young](#), Hui Tian, Hardi Peter, Robert J. Rutten, Chris J. Nelson, Zhenghua Huang,

[Space Science Reviews](#) December 2018, 214:120

<https://link.springer.com/content/pdf/10.1007%2Fs11214-018-0551-0.pdf>

22-29 Oct

Exhaustive study of three-time periods of solar activity due to single active regions: sunspot, flare, CME, and, geo-effective characteristics

[Shirsh Lata Soni](#), [Manohar Lal Yadav](#), [Radhe Syam Gupta](#), [Pyare Lal Verma](#)

Astrophysics and space science journal 2020

<https://arxiv.org/ftp/arxiv/papers/2012/2012.04853.pdf>

23 Oct

Multi-viewpoint Coronal Mass Ejection Catalog Based on STEREO COR2 ObservationsAngelos [Vourlidas](#)^{1,4}, Laura A. Balmaceda^{2,5,6}, Guillermo Stenborg³, and Alisson Dal Lago²2017 ApJ 838 141 [File](#)<http://sci-hub.cc/10.3847/1538-4357/aa67f0>

24-29 Oct: высокая вспышечная активность западной AR 1875, включая ряд вспышек балла X

Exhaustive study of three-time periods of solar activity due to single active regions: sunspot, flare, CME, and, geo-effective characteristics[Shirsh Lata Soni](#), [Manohar Lal Yadav](#), [Radhe Syam Gupta](#), [Pyare Lal Verma](#)

Astrophysics and space science journal 2020

<https://arxiv.org/ftp/arxiv/papers/2012/2012.04853.pdf>**The Halloween Flares and Large-Scale Correlations**Richard [Schwartz](#) and Hugh Hudson

RHESSI Halloween Nugget, Oct 2013

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/The_Halloween_Flares_and_Large-Scale_Correlations

24 Oct: 00:30 UT, Earth-facing sunspot AR1877 (S10E08) erupted, producing a powerful M9-class flare. A faint halo CME was observed after the M9 event in AR 11877 early in the day.

A Study of Pre-Flare Solar Coronal Magnetic Fields: Magnetic Flux RopesAiyang [Duan](#), [Chaowei Jiang](#), [Wen He](#), [Xueshang Feng](#), [Peng Zou](#), [Jun Cui](#)

ApJ 2019

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

24-25 Oct

Observations of solar flares with IRIS and SDO

D. [Li](#), D.E. Innes, Z. J. Ning

A&A 2015

<http://arxiv.org/pdf/1512.05147v1.pdf>

25 Oct – 03:11: M2.9 вспышка, **пересвет** на STEREO-B, $B=26^2/282=0,18$
08:03: X1.7 вспышка, **пересвет** на STEREO-B, $B=54^2/282=0,38$
10:16: M1.0 **пересвет** $B=14^2/282=0,1$ $\leftarrow 16s$ $8s \rightarrow$ **10:05** $B=11^2/282=0,078$
15:01: X2.1 вспышка, **пересвет** на STEREO-B, $B=90^2/282=0,64$
17:11: M1.3 вспышка, **пересвет** на STEREO-B, $B=9^2/282=0,06$
19:21: M2.3 вспышка, **пересвет** на STEREO-B, $B=19^2/282=0,13$
21:01: M1.9 вспышка, **пересвет** на STEREO-B, $B=23,5^2/282=0,17$

25 Oct: near E-limb region AR1882 produced 3 powerful flares with strong microwaves and type II bursts - an M2.9 flare at 03:02; an impulsive X1.7 event at 08:01 associated with a relatively small CME off the east limb; **Gamma** at 15:03 an impulsive X2.1 flare. A faint asymmetric halo CME was observed after the X1.7 event at 08h while a significantly larger full halo asymmetric CME was observed after the X2.1 flare near 15h.

Detection of decayless oscillations in solar transition region loops L4

Yuhang [Gao](#), Zhenyong Hou, Tom Van Doorselaere and Mingzhe Guo

A&A Letter Volume 681, January 2024

<https://doi.org/10.1051/0004-6361/202348702>

<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

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>

A type II solar radio burst without a coronal mass ejection

D. E. [Morosan](#), J. Pomoell, A. Kumari, E. K. J. Kilpua, R. Vainio

A&A 2023

<https://arxiv.org/pdf/2305.11545.pdf>

Assessing the spectral characteristics of band splitting type II radio bursts observed by CALLISTO spectrometers

F. N. [Minta](#), S. Nozawa, K. Kamen, A. Elsaid, A. Ayman

Adv Sp Res. 1-14 (2022)

<https://arxiv.org/ftp/arxiv/papers/2301/2301.13839.pdf>

Shock-accelerated electrons during the fast expansion of a coronal mass ejection

D. E. [Morosan](#), J. Pomoell, A. Kumari, R. Vainio, E. K. J. Kilpua

A&A 2022

<https://arxiv.org/pdf/2211.06049.pdf>

Особенности развития длительных потоков высокоэнергичного гамма-излучения на разных стадиях солнечных вспышек.

Минасянц Г.С., Минасянц Т.М., Томозов В.М.
СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 5. 2019. № 3. С. 11–20
<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. 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

Statistical Investigation of Supersonic Downflows in the Transition Region above Sunspots

[Tanmoy Samanta](#), [Hui Tian](#), [Debi Prasad Choudhary](#)

ApJ 2018
<https://arxiv.org/pdf/1804.05054.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

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>

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

2017 ApJ 838 70
<http://sci-hub.cc/10.3847/1538-4357/aa656f>

Very Long-period Pulsations before the Onset of Solar Flares

Baolin **Tan**, Zhiqiang Yu, Jing Huang, Chengming Tan, Yin Zhang

ApJ 2016
<https://arxiv.org/pdf/1610.09291v1.pdf>

On Understanding the Nature of Collision of Coronal Mass Ejections Observed by \textit{STEREO}

Wageesh **Mishra**, Yuming Wang, Nandita Srivastava

ApJ 2016
<http://arxiv.org/pdf/1607.07692v1.pdf> File

EUV Irradiance Observations from SDO/EVE as a Diagnostic of Solar Flares

Ryan O. **Milligan**

Conference proceedings for the symposium on "Solar and Stellar Flares and their Effects on the Planets" at the IAU General Assembly in Honolulu, HI, August 2015

<http://arxiv.org/pdf/1604.07793v1.pdf>

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>

26 Oct – 11:16: M1.8 вспышка, **пересвет** на STEREO-B, $B=12*2/281=0,09$
19:26: M3.1 вспышка, **пересвет** на STEREO-B, $B=19*2/281=0,14$
20:16: M1.0 **пересвет** $B=12,5*2/281=0,09$ $\leftarrow 16s$ $8s \rightarrow B=12,5/281=0,044$

26 Oct: 09:37 – M1.5 flare in **AR1882, S9~430, наш II тип**
11:17 – M1.8/1N flare in **AR1882 (S05E58), S5~470**

Turbulence in Sources of Decimetric Flare Continua

Marian Karlický

Solar Physics volume 298, Article number: 95 (2023)

<https://link.springer.com/content/pdf/10.1007/s11207-023-02188-5.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>

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>

CMEs in the Heliosphere: III. A Statistical Analysis of the Kinematic Properties Derived from Stereoscopic Geometrical Modelling Techniques Applied to CMEs Detected in the Heliosphere from 2008 to 2014 by STEREO/HI-1

D. Barnes, J. A. Davies, R. A. Harrison, J. P. Byrne, C. H. Perry, V. Bothmer, J. P. Eastwood, P. T. Gallagher, E. K. J. Kilpua, C. Möstl, L. Rodriguez, A. P. Rouillard, D. Odstrcil

Solar Phys. 2020

<https://arxiv.org/pdf/2006.14879.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

Shock location and CME 3D reconstruction of a solar type II radio burst with LOFAR

P. Zucca, D. E. Morosan, A. P. Rouillard, R. Fallows, P. T. Gallagher, J. Magdalenic, K-L. Klein, G. Mann,

A&A 2018

<https://arxiv.org/pdf/1804.01025.pdf> File

Turbulence and Heating in the Flank and Wake Regions of a Coronal Mass Ejection

Siteng Fan, Jiansen He, Limei Yan, Steven Tomczyk, Hui Tian...

Solar Physics January 2018, 293:6

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>

The Impact of a Filament Eruption on Nearby High-lying Cool Loops

L. K. **Harra**¹, S. A. Matthews¹, D. M. Long¹, G. A. Doschek², and B. De Pontieu
2014 ApJ 792 93

<http://fr.arxiv.org/pdf/1409.0377v1>

27 Oct – 12:46: M3.5 вспышка, **пересвет** на STEREO-B, $B=20^{\circ}2/281=0,14$
Видимо, наложились две вспышки: S09E71 SN 1884 и N06W63 1F 1875. Пересвет на 1-ой.

Signature of the turbulent component of solar dynamo on active region scales and its association with flaring activity

[Valentina I. Abramenko](#)

MNRAS 2021

<https://arxiv.org/pdf/2111.04425.pdf>

27 Oct-1 Nov

Deep-learning Reconstruction of Sunspot Vector Magnetic Fields for Forecasting Solar Storms

Dattaraj B. **Dhuri**^{1,2}, Shamik Bhattacharjee¹, Shravan M. Hanasoge^{1,2}, and Sashi Kiran Mahapatra¹
2022 ApJ 939 64

<https://iopscience.iop.org/article/10.3847/1538-4357/ac9413/pdf>

28 Oct - 02:16: X1.0 **пересвет** $A=46^{\circ}2/311=0,30 \leftarrow 16s \quad 8s \rightarrow$ **02:06** $A=37,5^{\circ}2/311=0,241$
04:40: M5.1 вспышка, **пересвет** на STEREO-A, $A=32^{\circ}2/311=0,21$
14:16: M2.8 **пересвет** $A=29^{\circ}2/311=0,19 \leftarrow 16s \quad 8s \rightarrow$ **14:05** $A=23^{\circ}2/311=0,148$
16:16: M2.0 **пересвет** $A=29^{\circ}2/311=0,19 \leftarrow 16s \quad 8s \rightarrow$ $A=29/311=0,093$
по картинке GOES
20:56: M1.5 вспышка, **пересвет** на STEREO-A, $A=11,5^{\circ}2/311=0,07$

28 Oct: 02:03 – западная (N04W66) **X1.0/2N** вспышка, S15~3300, близкая к импульсной **Sustained Gamma**
Несколько вспышек балла M; небольшие восточные протоны ~4 pfu

Extreme solar events

Review

[Edward W. Cliver](#), [Carolus J. Schrijver](#), [Kazunari Shibata](#) & [Ilya G. Usoskin](#)

[Living Reviews in Solar Physics](#) volume 19, Article number: 2 (2022)

<https://link.springer.com/content/pdf/10.1007/s41116-022-00033-8.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>

Magnetic imprints of eruptive and non-eruptive Solar flares as observed by Solar Dynamics Observatory

[N. Vasantharaju](#), [P. Vemareddy](#), [B. Ravindra](#), [V. H. Doddamani](#)

ApJ 2022

<https://arxiv.org/pdf/2201.06550.pdf>

Indications of stellar coronal mass ejections **through coronal dimmings**

Astrid M. **Veronig**, Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson
Nature Astronomy Volume 5, p. 697-706 **2021**
<https://www.nature.com/articles/s41550-021-01345-9.pdf>
<https://doi.org/10.1038/s41550-021-01345-9>
<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

Successive Coronal Mass Ejections Associated with Weak Solar Energetic Particle Events
Bin **Zhuang**, [Noé Lugaz](#), [Tingyu Gou](#), [Liuguan Ding](#)
ApJ **2021**
<https://arxiv.org/pdf/2109.02225.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>

First Fermi-LAT Solar Flare Catalog
M. **Ajello**¹, L. Baldini², D. Bastieri^{3,4}, R. Bellazzini⁵, A. Berretta⁶, E. Bissaldi^{7,8}, R. D. Blandford⁹, R. Bonino^{10,11}, P. Bruel¹², S. Buson¹³Show full author list
2021 ApJS 252 13
<https://arxiv.org/pdf/2101.10010.pdf> File
<https://doi.org/10.3847/1538-4365/abd32e>

On the seismic emission in sunspots associated with Lorentz force changes accompanying major solar flares
[Hirdesh Kumar](#), [Brajesh Kumar](#)
MNRAS **2020**
<https://arxiv.org/pdf/2007.05231.pdf>

Spectral Structures of Type II Solar Radio Bursts and Solar Energetic Particles
Kazumasa Iwai, [Seiji Yashiro](#), [Nariaki V. Nitta](#), [Yuki Kubo](#)
ApJ **2019**
<https://arxiv.org/ftp/arxiv/papers/1911/1911.05897.pdf>

Особенности развития длительных потоков высокоэнергичного гамма-излучения на разных стадиях солнечных вспышек.
[Минасянц Г.С.](#), [Минасянц Т.М.](#), [Томозов В.М.](#)
СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 5. **2019**. № 3. С. 11–20
<https://naukaru.ru/ru/storage/view/39748>

Pre-flare processes, flux rope activation, large-scale eruption and associated X-class flare from the active region NOAA 11875
Prabir K. **Mitra** (USO/PRL), [Bhuwan Joshi](#) (USO/PRL)
ApJ **2019**
<https://arxiv.org/pdf/1908.04059.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

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

S. W. **Kahler**¹, E. W. Cliver², and M. Kazachenko³
2018 ApJ 868 81
sci-hub.tw/10.3847/1538-4357/aae9d8

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>

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**

Quasi-Periodic Pulsations during the Impulsive and Decay phases of an X-class Flare

Laura A. **Hayes**, Peter T. Gallagher, Brian R. Dennis, [Jack Ireland](#), [Andrew R. Inglis](#), Daniel F. Ryan
2016
<http://arxiv.org/pdf/1607.06957v1.pdf>

ДИАГНОСТИКА АНИЗОТРОПИИ УСКОРЕННЫХ ЭЛЕКТРОНОВ ПО НАБЛЮДАЕМОЙ ПОЛЯРИЗАЦИИ МИКРОВОЛНОВОГО ИЗЛУЧЕНИЯ СОЛНЕЧНЫХ ВСПЫШЕЧНЫХ ПЕТЕЛЬ

Моргачев А.С.1,2, Кузнецов С.А.1,2, Мельников В.Ф.2
Пулково «Солнечная и солнечно-земная физика – 2015», с.285

Fine Structure in Flare Soft X-ray Light Curves

Brian **Dennis** and Kim Tolbert:
RHESSI Science Nuggets, No. 262, Sept **2015**
http://sprg.ssl.berkeley.edu/~tohan/wiki/index.php/Fine_Structure_in_Flare_Soft_X-ray_Light_Curves

29 Oct - 21:55: X2.3 вспышка, **пересвет** на STEREO-A, $A=91*2/312=0,58$

29 Oct: 21:54 – западная (N08W85) квазиимпульсная X2.3 **вспышка**, S15~4200,

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>

31 Oct - 14:16: M1.9 **пересвет** $A=29*2/312=0,19 \leftarrow 16s \quad 8s \rightarrow A=29/312=0,093$

31 Oct: 13:51 – M1.9 вспышка в AR 1877 без микроволн

Cross-Calibrating Sunspot Magnetic Field Strength Measurements from the McMath–Pierce Solar Telescope and the Dunn Solar Telescope

Fraser T. **Watson**, Christian Beck, Matthew J. Penn, Alexandra Tritschler...
Solar Phys. **2015**
<http://arxiv.org/pdf/1511.07315v1.pdf>

31 Oct - 2 Nov

The formation of an inverse S-shaped active-region filament driven by sunspot motion and magnetic reconnection

X.L. **Yan**, E.R. Priest, Q.L. Guo, Z.K. Xue, J.C. Wang, L.H. Yang

ApJ 832 23 2016

<http://arxiv.org/pdf/1609.04871v1.pdf>

1 Nov: 19:53 – M6.3 вспышка в AR 1884 (S11E01), S5~410

Photospheric Lorentz force changes in eruptive and confined solar flares

[Samridhi Sankar Maity](#), [Ranadeep Sarkar](#), [Piyali Chatterjee](#), [Nandita Srivastava](#)

ApJ 2023

<https://arxiv.org/pdf/2312.06787.pdf>

Indications of stellar coronal mass ejections through coronal dimmings

Astrid M. **Veronig**, Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson

Nature Astronomy Volume 5, p. 697-706 2021

<https://www.nature.com/articles/s41550-021-01345-9.epdf>

<https://doi.org/10.1038/s41550-021-01345-9>

<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

Improving the Medium-Term Forecasting of Space Weather: A Big Picture Review from a Solar Observer's Perspective **Review**

Angelos **Vourlidas**

Front. Astron. Space Sci., 12 May 2021 |

<https://doi.org/10.3389/fspas.2021.651527>

<https://www.frontiersin.org/articles/10.3389/fspas.2021.651527/full>

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>

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>

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

1-4 Nov

THE EVOLUTION OF THE ELECTRIC CURRENT DURING THE FORMATION AND ERUPTION OF ACTIVE-REGION FILAMENTS

Jincheng **Wang**^{1,2}, Xiaoli Yan^{1,3}, Zhongquan Qu¹, Zhike Xue¹, Yongyuan Xiang¹, and Hao Li¹

2016 ApJ 817 156

The Formation and Magnetic Structures of Active-region Filaments Observed by NVST, SDO, and Hinode

X.L. **Yan**, Z.K. Xue, G.M. Pan, J.C. Wang, Y.Y. Xiang, D.F. Kong, and L.H. Yang

Astrophysical Journal Supplement Series (*ApJS*) 219 17 2015

1-8 Nov

Exhaustive study of three-time periods of solar activity due to single active regions: sunspot, flare, CME, and, geo-effective characteristics

[Shirsh Lata Soni](#), [Manohar Lal Yadav](#), [Radhe Syam Gupta](#), [Pyare Lal Verma](#)

Astrophysics and space science journal **2020**

<https://arxiv.org/ftp/arxiv/papers/2012/2012.04853.pdf>

2 Nov – **Затмение**

новое небольшое возрастание протонов

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>

Complexity of the Upper Solar Atmosphere Revealed from Spectropolarimetry during a Solar Eclipse

Z. Q. [Qu](#)^{1,2}, L. Chang^{1,2}, G. T. Dun¹, Z. Xu¹, X. M. Cheng^{1,3}, L. H. Deng¹, X. Y. Zhang¹, and Y. H. Jin^{1,2}

2022 ApJ 940 150

<https://iopscience.iop.org/article/10.3847/1538-4357/ac9af4/pdf>

What determines the X-ray intensity and duration of a solar flare?

Jeffrey W. [Reep](#), [Kalman J. Knizhnik](#)

ApJ **2019**

<https://arxiv.org/pdf/1903.10564.pdf>

Spectro-Imaging Polarimetry of the Local Corona During Solar Eclipse

Z. Q. [Qu](#), G. T. Dun, L. Chang, G. Murray, X. M. Cheng, X. Y. Zhang, L. H. Deng
Solar Physics February **2017**, 292:37

Spectro-Imaging Polarimetry of the Local Corona During Solar Eclipse

Z. Q. [Qu](#), G. T. Dun, L. Chang, G. Murray, X. M. Cheng, X. Y. Zhang, L. H. Deng
Solar Physics February **2017**, 292:37

The formation of an inverse S-shaped active-region filament driven by sunspot motion and magnetic reconnection

X.L. [Yan](#), E.R. Priest, Q.L. Guo, Z.K. Xue, J.C. Wang, L.H. Yang

ApJ **2016**

<http://arxiv.org/pdf/1609.04871v1.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**

3 Nov: Total Solar Eclipse 05:22– квазиимпульсная M5.0 вспышка в AR 1884 (S12W16), S15~210

**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

Изв. Крао Том: 118Номер: 1 Год: 2022 Страницы: 65-74

https://www.elibrary.ru/download/elibrary_48073416_76156594.pdf

Indications of stellar coronal mass ejections through coronal dimmings

Astrid M. **Veronig**, Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson
Nature Astronomy Volume 5, p. 697-706 **2021**
<https://www.nature.com/articles/s41550-021-01345-9.epdf>
<https://doi.org/10.1038/s41550-021-01345-9>
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Cosmic Meteorology

[Mike Lockwood](#), [Mat Owens](#)

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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>

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

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

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
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Large Scale Coronal Structures Imaged During the 2012/2013 Total Solar Eclipses

Nathalia **Alzate**, Huw Morgan, Shadia R. Habbal, Miloslav Druckmüller, Constantinos Emmanouilidis
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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
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Q. W. **Song**, H. Nakajima, G. L. Huang, B. L. Tan, Y. Huang, Z. Wu
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<http://link.springer.com/article/10.1007/s11207-016-1004-0>

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

Markus J. **Aschwanden**

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Mass motion in upper solar chromosphere detected from solar eclipse observation

Zhi Li, Zhongquan Qu, Xiaoli Yan, Guangtao Dun,
Astrophysics and Space Science May 2016, 361:159

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Probing shock geometry via the charge to mass ratio dependence of heavy ion spectra from multiple spacecraft observations of the 2013 November 4 event

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Research in Astron. Astrophys. 2016
<https://arxiv.org/pdf/1609.09479v1.pdf>

Injection of solar energetic particles into both loop legs of a magnetic cloud

Nina Dresing, Ra'el Gómez-Herrero, Bernd Heber, Miguel Angel Hidalgo, Andreas Klassen, Manuela Temmer, Astrid Veronig
A&A 2016
<http://arxiv.org/pdf/1601.00491v1.pdf>

5 Nov: 22:12 – очень импульсная X3.0 вспышка в AR 1890 (S12E46), S15~1400; почти без протонов. **До и после еще несколько импульсных вспышек балла M и C.**

A CME was observed off the northeast limb and north pole after a filament eruption which began near 01:25 UTC. Preliminary analysis indicate that the CME was not Earth directed. A relatively slow and unimpressive partial halo CME was observed after the X3 event late in the day.

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024
<https://arxiv.org/pdf/2401.16101.pdf>

When it rippled in one place and exploded in another

[Ivan Zimovets](#)

RHESSI Science Nuggets #465 Dec 2023

https://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/When_it_rippled_in_one_place_and_exploded_in_another

The Mean Temperatures of CME-Related Dimming Masses

Emily Thomson, Hugh Hudson

Solar Phys. 298, Article number: 130 (2023)

<https://link.springer.com/content/pdf/10.1007/s11207-023-02222-6.pdf>

ПРЕДВСПЫШЕЧНЫЕ РЕНТГЕНОВСКИЕ ПУЛЬСАЦИИ С ИСТОЧНИКАМИ ВНЕ АКТИВНОЙ ОБЛАСТИ ОСНОВНОЙ ВСПЫШКИ

Зимовец И.В., Шарыкин И.Н., Кальтман Т.И., Ступишин А.Г., Низамов Б.А.

Г и А Том: 63Номер: 5 Год: 2023 Страницы: 547-560

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

Indications of stellar coronal mass ejections through coronal dimmings

Astrid M. **Veronig**, Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson
Nature Astronomy Volume 5, p. 697-706 **2021**
<https://www.nature.com/articles/s41550-021-01345-9.epdf>
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<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

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](#)
Space Science Reviews **2021**
<https://arxiv.org/pdf/2110.08408.pdf> **File**

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>

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>

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

[Lijuan Liu](#), [Yuming Wang](#), [Zhenjun Zhou](#), [Jun Cui](#)
ApJ **2021**
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Inferring the magnetic field asymmetry of solar flares from the degree of polarisation at millimetre wavelengths

Douglas F. da **Silva**, [Paulo J. A. Simões](#), [R. F. Hidalgo Ramírez](#), [Adriana Válio](#)
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Spatio-temporal energy partitioning in a non-thermally dominated two-loop solar flare

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Estimation of Key Sunquake Parameters through Hydrodynamic Modeling and Cross-Correlation Analysis

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Center-to-Limb Variation of Solar Bursts Polarization at Millimeter Wavelengths

R. F. Hidalgo [Ramírez](#), A. Morosi, D. Silva, P. J. A. Simoães, A. Valio
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Yongliang [Song](#), [Hui Tian](#)
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A Statistical Study of the Magnetic Imprints of X-Class Flares using SDO/HMI Vector Magnetograms

Zekun [Lu](#), [Weiguang Cao](#), [Gaoxiang Jin](#), [Yining Zhang](#), [Mingde Ding](#), [Yang Guo](#)
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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](#)
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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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Spectral Trends of Solar Bursts at Sub-THz Frequencies

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[Solar Physics](#) January **2017**, 292:21
<http://sci-hub.cc/10.1007/s11207-016-1043-6>

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>

Joint radio, EUV, and X-ray analysis of the 2013 November 5 cold flare

Galina [Motorina](#)*1, Eduard Kontar², and Gregory Fleishman³
CESRA **2016** p.63
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5-10 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>

Deep-learning Reconstruction of Sunspot Vector Magnetic Fields for Forecasting Solar Storms

Dattaraj B. [Dhuri](#)^{1,2}, Shamik Bhattacharjee¹, Shравan M. Hanasoge^{1,2}, and Sashi Kiran Mahapatra¹

2022 ApJ 939 64

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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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Differences in periodic magnetic helicity injection behaviour between flaring and non-flaring Active Regions: Case Study

[M. B. Korsos](#), [P. Romano](#), [H. Morgan](#), [Y. Ye](#), [R. Erdelyi](#), [F. Zuccarello](#)

2020

<https://arxiv.org/pdf/2006.07659.pdf>

6 Nov

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics

2024

<https://arxiv.org/pdf/2401.16101.pdf>

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>

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[Jeffrey W. Reep](#), [Will T. Barnes](#)

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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

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<http://arxiv.org/pdf/1409.3691v1.pdf>

6-10 Nov

Deep-learning Reconstruction of Sunspot Vector Magnetic Fields for Forecasting Solar Storms

Dattaraj B. **Dhuri**^{1,2}, Shamik Bhattacharjee¹, Shravan M. Hanasoge^{1,2}, and Sashi Kiran Mahapatra¹
2022 ApJ 939 64

<https://iopscience.iop.org/article/10.3847/1538-4357/ac9413/pdf>

A STATISTICAL STUDY OF FLARE PRODUCTIVITY ASSOCIATED WITH SUNSPOT PROPERTIES IN DIFFERENT MAGNETIC TYPES OF ACTIVE REGIONS

Ya-Hui **Yang**¹, Min-Shiu Hsieh², Hsiu-Shan Yu³, and P. F. Chen⁴

2017 ApJ 834 150

<http://sci-hub.cc/doi/10.3847/1538-4357/834/2/150>

7 Nov - 00:16: M1.8 **пересвет** $A=19*2/312=0,12 \leftarrow 16s \quad 8s \rightarrow 00:06 \quad A=11*2/312=0.071$

7 Nov: 00:02 – LDE M2 вспышка и небольшое возрастание протонов
~10 UT – серьёзная залимбовая W эрупция с крупным CME, сильно отклоняющим корональные лучи

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

<https://arxiv.org/pdf/2401.16101.pdf>

Detection of decayless oscillations in solar transition region loops L4

Yuhang **Gao**, Zhenyong Hou, Tom Van Doorselaere and Mingzhe Guo

A&A Letter Volume 681, January 2024

<https://doi.org/10.1051/0004-6361/202348702>

<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

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>

Investigation on the Spatiotemporal Structures of Supra-Arcade Spikes

[Rui Liu](#), [Yuming Wang](#)

A&A 2021

<https://arxiv.org/pdf/2106.04752.pdf>

Narrowband Spikes Observed during the 2013 November 7 Flare

Marian **Karlický**¹, Jan Benáček², and Ján Rybák³

2021 ApJ 910 108

<https://arxiv.org/pdf/2104.01345.pdf>

<https://doi.org/10.3847/1538-4357/abe62b>

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>

Multispacecraft Observation of Unidirectional and Bidirectional Alfvén Waves within Large-scale Magnetic Clouds

Zehao **Wang**^{1,2}, Xueshang Feng¹, and Jianchuan Zheng

2019 ApJL 887 L18

[sci-hub.se/10.3847/2041-8213/ab595d](https://doi.org/10.3847/2041-8213/ab595d)

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

Nishtha **Sachdeva**

Ph.D. **Thesis** 2019

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

Decameter Type IV Burst Associated with a behind-the-limb CME Observed on 7 November 2013

V.N.**Melnik**, [A.I.Brazhenko](#), [A.A.Konovalenko](#), [V.V.Dorovskyy](#), [H.O.Rucker](#), [M.Panchenko](#), [A.V.Frantsuzenko](#), [M.V. Shevchuk](#)

Solar Phys. 2018

<https://arxiv.org/ftp/arxiv/papers/1803/1803.01147.pdf>

Decameter type IV burst associated with behind-limb CME observed on November 7, 2013

Melnik V., Brazhenko A., Dorovskyy V., Rucker H., Panchenko M., Frantsuzenko A., Shevchuk M.. Proceedings of Ninth Workshop “Solar Influences on the Magnetosphere, Ionosphere and Atmosphere” Sunny Beach, Bulgaria, May 30 - June 3, 2017, p. 13-18

http://ws-sozopol.stil.bas.bg/2017Sunny/Proceedings2017_V3.pdf

On the Directivity of Low-Frequency Type IV Radio Bursts

Nat **Gopalswamy**, Sachiko Akiyama, Pertti Mäkelä, Seiji Yashiro, Iver H. Cairns

URSI Asia-Pacific Radio Science Conference in Seoul, August 21-25, 2015

2016

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Injection of solar energetic particles into both loop legs of a magnetic cloud

Nina **Dresing**, Ra?l Gómez-Herrero, Bernd Heber, Miguel Angel Hidalgo, Andreas Klassen, Manuela Temmer, Astrid Veronig

A&A 2016

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A statistical correlation of sunquakes based on their seismic, white light, and X-ray emission

J.C. **Buitrago-Casas**, J.C. Martinez Oliveros, C. Lindsey, B. Calvo-Mozo, S. Krucker, L. Glesener, S. Zharkov

Solar Phys. 2015

<http://arxiv.org/pdf/1502.07798v1.pdf>

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Photospheric Lorentz force changes in eruptive and confined solar flares

[Samridhi Sankar Maity](#), [Ranadeep Sarkar](#), [Piyali Chatterjee](#), [Nandita Srivastava](#)

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Separating the effects of earthside and far side solar events. A case study

Silja **Pohjolainen**, Nasrin Talebpour Sheshvan, Christian Monstein

[Advances in Space Research](https://www.sciencedirect.com/science/article/pii/S0273117723007317) 2023
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On the Role of Interplanetary Shocks in Accelerating MeV Electrons

N. Talebpour [Sheshvan](#), [N. Dresing](#), [R. Vainio](#), [A. Afanasiev](#), [D. E. Morosan](#)

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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>

Magnetic helicity and energy budget around large confined and eruptive solar flares

[Manu Gupta](#), [J. K. Thalmann](#), [A. M. Veronig](#)

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

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

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

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ApJ 2019

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A Statistical Study of the Magnetic Imprints of X-Class Flares using SDO/HMI Vector Magnetograms

Zekun [Lu](#), [Weiguang Cao](#), [Gaoxiang Jin](#), [Yining Zhang](#), [Mingde Ding](#), [Yang Guo](#)

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Transient Mass Loss Analysis of Solar Observations using Stellar Methods

M. K. [Crosley](#), R. A. Osten, C. Norman

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CONSTRAINING THE SOLAR CORONAL MAGNETIC FIELD STRENGTH USING SPLIT-BAND TYPE II RADIO BURST OBSERVATIONS

P. [Kishore](#)¹, R. Ramesh¹, K. Hariharan¹, C. Kathiravan¹, and N. Gopalswamy

2016 ApJ 832 59

<http://sci-hub.cc/10.3847/0004-637X/832/1/59>

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

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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

RAPID PENUMBRA AND LORENTZ FORCE CHANGES IN AN X1.0 SOLAR FLARE

Zhe [Xu](#)^{1,2}, Yunchun Jiang¹, Jiayang Yang¹, Bo Yang^{1,2}, and Yi Bi
2016 ApJ 820 L21

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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9 Nov

The Solar X-ray Corona

Review

[Paola Testa](#), [Fabio Reale](#)

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M. [Asgari-Targhi](#)¹, A. A. van Ballegooijen¹, and A. R. Davey²

2019 ApJ 881 107

sci-hub.se/10.3847/1538-4357/ab2e01

The nature of energy source powering solar coronal loops driven by nanoflares

L. P. [Chitta](#), [H. Peter](#), [S. K. Solanki](#)

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[Моторина](#) Г.Г.

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<https://arxiv.org/ftp/arxiv/papers/1710/1710.10652.pdf>

Are All Flare Ribbons Simply Connected to the Corona?

Philip G. [Judge](#)¹, Alin Paraschiv^{2,3}, Daniela Lacatus^{2,3}, Alina Donea², and Charlie Lindsey⁴

2017 ApJ 838 138

<http://sci-hub.cc/10.3847/1538-4357/aa656c>

Syrovatskii's "constant density" approximation

Hugh [Hudson](#) and Paulo Simões

RHESSI Science Nuggets, #288 Dec 2016

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Electron acceleration and hard X-ray emission from SOL2013-11-09

Yuri [Tsap](#) and Galina Motorina.

RHESSI Science Nugget No. 273, May 2016

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Electron_acceleration_and_hard_X-ray_emission_from_SOL2013-1

УСКОРЕНИЕ ЭЛЕКТРОНОВ И НАГРЕВ ВСПЫШЕЧНОЙ ПЛАЗМЫ КОРОНАЛЬНЫХ ПЕТЕЛЬ

Цап Ю.Т.1,2, Моторина Г.Г.2, Копылова Ю.Г.
Пулково «Солнечная и солнечно-земная физика – 2015», с.379

Impulsive Heating of Solar Flare Ribbons Above 10 MK

Paulo J. A. **Simões**, David R. Graham, Lyndsay Fletcher
Solar Phys. 2015
<http://arxiv.org/pdf/1505.03384v1.pdf>

Direct observation of the energy release site in a solar flare by SDO/AIA, Hinode/EIS and RHESSI

Paulo J. A. **Simões**, David R. Graham, Lyndsay Fletcher
A&A 2015
<http://arxiv.org/pdf/1503.01491v1.pdf>

Evidence of Non-Thermal Particles in Coronal Loops Heated Impulsively by Nanoflares

Paola **Testa** (1), Bart De Pontieu (2,3), Joel Allred (4), Mats Carlsson (3), Fabio Reale (5), Adrian Daw (4), Viggo Hansteen (3), Juan Martinez-Sykora (6), Wei Liu (2,7), Ed DeLuca (1), Leon Golub (1), Sean McKillop (1), Kathy Reeves (1), Steve Saar (1), Hui Tian (1), Jim Lemen (2), Alan Title (2), Paul Boerner (2), Neal Hurlburt (2), Ted Tarbell (2), J.P. Wuelser (2), Lucia Kleint (2,6), Charles Kankelborg (8), Sarah Jaeggli
Science, 2014

Movies are available at: http://www.lmsal.com/~ptesta/iris_science_mov/
<http://arxiv.org/pdf/1410.6130v1.pdf>

9-10 Nov

Energy conversion rate of an active region transient brightening estimated by a spectroscopic observation of Hinode

[Toshiki Kawai](#), [Shinsuke Imada](#)
ApJ 2021
<https://arxiv.org/pdf/2106.06208.pdf>

10 Nov: 05:14 – ещё одна **очень импульсная X1.1/2B** вспышка в AR 1890 (S14W13), S9~580

Корональная волна, 304 А; A CME was observed in STEREO-A imagery just after the flare. Only a small CME was observed after the X1 flare

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)
Reviews of Modern Plasma Physics 2024
<https://arxiv.org/pdf/2401.16101.pdf>

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>

Detections of Multi-Periodic Oscillations during a Circular Ribbon Flare

[Zongjun Ning](#), [Ya Wang](#), [Zhenxiang Xiang](#), [Dong Li](#)
Solar Phys. 2021

<https://arxiv.org/pdf/2112.03446.pdf>

An Eruptive Circular-ribbon Flare with Extended Remote Brightenings

[Chang Liu](#), [Avijeet Prasad](#), [Jeongwoo Lee](#), [Haimin Wang](#)

ApJ 2020

<https://arxiv.org/pdf/2007.14428.pdf>

A Statistical Study of the Magnetic Imprints of X-Class Flares using SDO/HMI Vector Magnetograms

Zekun [Lu](#), [Weiguang Cao](#), [Gaoxiang Jin](#), [Yining Zhang](#), [Mingde Ding](#), [Yang Guo](#)

ApJ 2018

<https://arxiv.org/pdf/1803.08310.pdf>

Does Nearby Open Flux Affect the Eruptivity of Solar Active Regions?

Marc L. [DeRosa](#), [Graham Barnes](#)

ApJ 2018

<https://arxiv.org/pdf/1802.01199.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>

Turnover Frequency in Solar Microwave Bursts with an Extremely Flat Optically Thin Spectrum

Q. W. [Song](#), H. Nakajima, G. L. Huang, B. L. Tan, Y. Huang, Z. Wu

Solar Phys. 2016

<http://link.springer.com/article/10.1007/s11207-016-1004-0>

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>

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>

11 Nov - 11:26: M2.4 вспышка, **пересвет** на STEREO-B, $B=22,5*2/312=0,14$

Investigation on the Spatiotemporal Structures of Supra-Arcade Spikes

[Rui Liu](#), [Yuming Wang](#)

A&A 2021

<https://arxiv.org/pdf/2106.04752.pdf>

11-13 Nov

Multispacecraft Observation of Unidirectional and Bidirectional Alfvén Waves within Large-scale Magnetic Clouds

Zehao [Wang](#)^{1,2}, Xueshang Feng¹, and Jianchuan Zheng

2019 ApJL 887 L18

[sci-hub.se/10.3847/2041-8213/ab595d](https://arxiv.org/abs/1908.08213)

Photospheric Flow Field Related to the Evolution of the Sun's Polar Magnetic Patches Observed by Hinode SOT

Anjali John [Kaithakkal](#), [Y. Suematsu](#), [M. Kubo](#), [Y. Iida](#), [D. Shiota](#), [S. Tsuneta](#)

ApJ, 2015

<http://arxiv.org/pdf/1412.8023v1.pdf>

12 Nov: 11:18 – неимпульсная M2.4 вспышка в дальней восточной AR 1897 или 1895 [S19E62], S5~150.

The 2013 November 12 Solar Energetic Electron Event Associated with Solar Jets

Wen [Wang](#)^{1,2}, Andrea Francesco Battaglia^{2,3}, Säm Krucker^{2,4}, and Linghua Wang¹

2023 ApJ 950 118

<https://iopscience.iop.org/article/10.3847/1538-4357/accc86/pdf>

14-19 Nov

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>

Probing sunspots with two-skip time–distance helioseismology

Thomas L. [Duvall](#) Jr.¹, Paul S. Cally², Damien Przybylski^{2,1}, Kaori Nagashima¹ and Laurent Gizon^{1,3}

A&A 613, A73 (2018)

<http://sci-hub.tw/https://www.aanda.org/articles/aa/abs/2018/05/aa32424-17/aa32424-17.html>

Flux rope proxies and fan-spine structures in active region NOAA 11897

Y. J. [Hou](#), T. Li, J. Zhang

A&A 2016

<http://arxiv.org/pdf/1606.09322v1.pdf>

15 Nov

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>

16 Nov: высокоскоростной поток из приличной КД с северной Vz-компонентой у Земли и без геомагнитной бури.

18 Nov

A secondary fan-spine magnetic structure in active region 11897

Yijun [Hou](#), [Ting Li](#), [Shuhong Yang](#), [Jun Zhang](#)

ApJ 2018

<https://arxiv.org/pdf/1811.11936.pdf>

On the extent of the moat flow in axisymmetric sunspots

[M. Verma](#), [P. Kummerow](#), [C. Denker](#)

Astronomische Nachrichten/Astronomical Notes 2018

<https://arxiv.org/pdf/1805.04356.pdf>

Long-Term Oscillations of Sunspots and a Special Class of Artifacts in SOHO(MDI) and SDO(HMI) Data

V.I. [Efremov](#), [A.A. Soloviev](#), [L.D. Parfinenko](#), [A. Riehoainen](#), [E. Kirichek](#), [V.V. Smirnova](#), [Y.N. Varun](#), [I. Bakunina](#), [I. Zhivanovich](#)

2018

<https://arxiv.org/ftp/arxiv/papers/1802/1802.06379.pdf>

Modeling of Solar Atmosphere Parameters Above Sunspots Using RATAN-600 Microwave Observations

A. G. [Stupishin](#), [T. I. Kaltman](#), [V. M. Bogod](#), [L. V. Yasnov](#)

[Solar Physics](#) January 2018, 293:13

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1228-7.pdf>

19 Nov – 10:25 – X1.0 вспышка; **пересвет** на STEREO-A: $A=59*2/312=0,38$

В списке GOES и Events ошибка в координатах; правильно S13W79 11893

19 Nov: 10:26 – короткая, но неимпульсная X1.0 вспышка в западной AR 1893

(S13W69) , **сильные микроволны S15~5100**, наш II тип, протоны слабые, halo CME

Indications of stellar coronal mass ejections through coronal dimmings

Astrid M. [Veronig](#), Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson

[Nature Astronomy](#) Volume 5, p. 697-706 2021

<https://www.nature.com/articles/s41550-021-01345-9.epdf>

<https://doi.org/10.1038/s41550-021-01345-9>

<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

Temporal and Spatial Association Between a Solar Flare, CME, and Radio Burst on 19 November 2013

[A. Shanmugaraju](#), [M. Syed Ibrahim](#), [K. Suresh](#), [P. Vijayalakshmi](#) & [Sajal Kumar Dhara](#)

[Solar Physics](#) volume 296, Article number: 77 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01823-3.pdf>

<https://doi.org/10.1007/s11207-021-01823-3>

Small Size Ground Level Enhancements During Solar Cycle 24

Leonty I. [Miroschnichenko](#), [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>

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

Fan Loops Observed by IRIS, EIS, and AIA

Avyarthana [Ghosh](#)^{1,2}, Durgesh Tripathi¹, G. R. Gupta¹, Vanessa Polito³, Helen E. Mason³, and Sami K. Solanki⁴,

2017 ApJ 835 244

CONSTRAINING THE SOLAR CORONAL MAGNETIC FIELD STRENGTH USING SPLIT-BAND TYPE II RADIO BURST OBSERVATIONS

P. [Kishore](#)¹, R. Ramesh¹, K. Hariharan¹, C. Kathiravan¹, and N. Gopalswamy

2016 ApJ 832 59

<http://sci-hub.cc/10.3847/0004-637X/832/1/59>

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

21 Nov

Prevalence of non-stationarity in quasi-periodic pulsations (QPPs) associated with M- and X-class solar flares

[Tishtrya Mehta](#), [Anne-Marie Broomhall](#), [Laura Hayes](#)

MNRAS 2023

<https://arxiv.org/pdf/2305.19737.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>

Direct observations of magnetic flux rope formation during a solar coronal mass ejection

Hongqiang [Song](#), Jie Zhang, Yao Chen, Xin Cheng

ApJL, 2014

<http://arxiv.org/pdf/1408.2000v1.pdf>

21 Nov – 19 Dec

Comparison of Potential Field Solutions for Carrington Rotation 2144†

Keiji [Hayashi](#), Shangbin Yang, Yuagyong Deng

JGR 2016

23 Nov – 02:36 – M1.1 вспышка; **пересвет** на STEREO-A: $A=10 \cdot 2/312=0,06$

13:26 – M1.0 вспышка; **пересвет** на STEREO-A: $A=13 \cdot 2/312=0,08$

25 Nov

Formation and material supply of an active-region filament associated with newly emerging flux

Jincheng [Wang](#), [Xiaoli Yan](#), [Qiaoling Guo](#), [Defang Kong](#), [Zhike Xue](#), [Liheng Yang](#), [Qiaoling Li](#)

MNRAS 488, Issue 3, September 2019, Pages 3794–3803

sci-hub.se/10.1093/mnras/stz1935

28-30 November: many CMEs with a backside origin was observed.

27 Nov: Several CMEs were observed during the day. The largest had its origin in a filament eruption that began late on November 26 in the southwest quadrant (and across the limb to the backside).

Ещё: середина дня - приличная эрупция большого N-центрального волокна.

28 Nov

Using Stereoscopic Observations of Cometary Plasma Tails to Infer Solar Wind Speed

Long [Cheng](#)^{1,2,3}, Quanhao Zhang^{1,2,3}, Yuming Wang^{1,2,3}, Xiaolei Li^{1,2,3}, and Rui Liu

2020 ApJ 897 87

<https://sci-hub.tw/https://iopscience.iop.org/article/10.3847/1538-4357/ab93b6>

29 Nov

Can One Predict Coronal Mass Ejection Arrival Times With Thirty-Minute Accuracy?

Gábor **Tóth**, [Bart van der Holst](#), [Ward Manchester IV](#)

Space Weather e2023SW003463 [Volume21, Issue5](#) 2023

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2023SW003463>

Sunward-propagating Solar Energetic Electrons inside Multiple Interplanetary Flux Ropes

Raúl **Gómez-Herrero**¹, Nina Dresing², Andreas Klassen², Bernd Heber², Manuela Temmer³, Astrid Veronig³, Radoslav Bučík^{4,5}, Miguel A. Hidalgo¹, Fernando Carcaboso¹, Juan J. Blanco

2017 ApJ 840 85

<http://sci-hub.cc/10.3847/1538-4357/aa6c5c>

An analysis of interplanetary solar radio emissions associated with a coronal mass ejection

Vratislav **Krupar**, Jonathan Eastwood, Oksana Kruparova, Ondrej Santolik, Jan Soucek, Jasmina Magdalenic, Angelos Vourlidas, Milan Maksimovic, Volker Bothmer, Niclas Mrotzek, Adam Pluta, David Barnes, Jackie Davies, Juan Carlos Martinez Oliveros, Stuart Bale

ApJ 823 L5 2016

<http://arxiv.org/pdf/1606.04301v1.pdf>

Radio triangulation of solar radio emissions: STEREO/Waves measurements

Vratislav **Krupar***^{1,2}, Eastwood Jonathan¹, Oksana Kruparova², Ondrej Santolik^{2,3}, Jan Soucek², Jasmina Magdalenic⁴, Vourlidas Angelos⁵, Milan Maksimovic⁶, Xavier Bonnin⁶, Volker Bothmer⁷, Niclas Mrotzek⁷, Adam Pluta⁷, David Barnes⁸, Jackie Davies⁸, Juan Carlos Martinez Oliveros⁹, and Stuart Bale

CESRA Abstract 2016

http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v1.pdf

CME flux rope and shock identifications and locations: Comparison of white light data, graduated cylindrical shell (GCS) model, and MHD simulations†

J. M. **Schmidt**, Iver H. Cairns, Hong Xie, O. C. St. Cyr, N. Gopalswamy

JGR 2016

The Langmuir waves associated with the 1 December 2013 type II burst

D. B. **Graham**, Iver H. Cairns

JGR Volume 120, Issue 6 June 2015 Pages 4126–4141

The multi-thermal and multi-stranded nature of coronal rain

P. **Antolin**, [G. Vissers](#), [T. M. D. Pereira](#), [L. Rouppe van der Voort](#), [E. Scullion](#)

ApJ 2015

<http://arxiv.org/pdf/1504.04418v1.pdf>

29 Nov – 1Dec

Type II Radio Emission From Sun To Earth And In The Lower Corona

Joachim **Schmidt***¹ and Iver Cairns

CESRA Abstract 2016

http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v1.pdf

1 Dec –Forbush

1 Dec: A filament eruption in the northwest quadrant began near 19:30 UTC and a partial halo CME was observed in LASCO and STEREO imagery after 21:30 UTC. **304 A.**

Magnetic connections across the chromosphere-corona transition region

[Philip G. Judge](#)

ApJ 2021

<https://arxiv.org/pdf/2104.07753.pdf>

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

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

[Solar Physics](#) July 2019, 294:91

sci-hub.se/10.1007/s11207-019-1476-9

The Langmuir waves associated with the 1 December 2013 type II burst

D. B. [Graham](#), Iver H. Cairns

JGR Volume 120, Issue 6 June 2015 Pages 4126–4141

1-4 Dec

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 Dec, 17:48 – **очень узкий**, северный CME (внутреннее ядро)

2-3 Dec

ICME Evolution in the Inner Heliosphere

Invited Review

J. G. [Luhmann](#), [N. Gopalswamy](#), [L. K. Jian](#) & [N. Lugaz](#)

[Solar Physics](#) volume 295, Article number: 61 (2020) **File**

<https://link.springer.com/content/pdf/10.1007%2Fs11207-020-01624-0.pdf>

Sunward-propagating Solar Energetic Electrons inside Multiple Interplanetary Flux Ropes

Raúl [Gómez-Herrero](#)¹, Nina Dresing², Andreas Klassen², Bernd Heber², Manuela Temmer³, Astrid Veronig³, Radoslav Bučík^{4,5}, Miguel A. Hidalgo¹, Fernando Carcaboso¹, Juan J. Blanco

2017 ApJ 840 85

<http://sci-hub.cc/10.3847/1538-4357/aa6c5c>

4 Dec - **Огромная filament eruption** was observed beginning near 21h UTC across the central meridian in the northern hemisphere.

Eruption of prominence initiated by loss of equilibrium: multipoint observations

P [Vemareddy](#), M Syed Ibrahim

MNRAS, Volume 527, Issue 2, January 2024, Pages 1774–1783,

<https://doi.org/10.1093/mnras/stad3323>

<https://academic.oup.com/mnras/article-pdf/527/2/1774/53252392/stad3323.pdf>

5 Dec – утром **продолжение** в западной части эрупции волокна 4-ого, **304 A**;
-- A filament eruption was observed near AR 11909 starting at 20:41 UTC in SDO/AIA imagery. STEREO imagery indicate that there was a CME associated with this event and that it could have an Earth directed component.

6 Dec

Solar Ultraviolet Bursts

Review

Peter R. [Young](#), Hui Tian, Hardi Peter, Robert J. Rutten, Chris J. Nelson, Zhenghua Huang,

[Space Science Reviews](#) December 2018, 214:120

<https://link.springer.com/content/pdf/10.1007%2Fs11214-018-0551-0.pdf>

Mass and energy supply of a cool coronal loop near its apex★

Limei **Yan**¹, Hardi Peter², Jiansen He¹, Lidong Xia⁴ and Linghua Wang¹
A&A 611, A49 (2018)

<http://sci-hub.tw/https://www.aanda.org/articles/aa/abs/2018/03/aa28436-16/aa28436-16.html>

7 Dec – 07:29, M1.2/1N flare in AR 1909 (S16W49), S5~220; наш II тип; wide CME

A Transient Coronal Sigmoid in Active Region NOAA 11909: Build-up Phase, M-class Eruptive Flare, and Associated Fast Coronal Mass Ejection

Hema Kharavat, **Bhuwan Joshi**, **Prabir K. Mitra**, **P. K. Manoharan** & **Christian Monstein**
Solar Physics volume 296, Article number: 99 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01830-4.pdf>

<https://doi.org/10.1007/s11207-021-01830-4>

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

Nishtha **Sachdeva**

Ph.D. **Thesis** 2019

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

Analysis of type II and type III solar radio bursts

Wijesekera, J. V.; **Jayarathne**, K. P. S. C.; **Adassuriya**, J.

Journal of Physics: Conference Series, Volume 1005, Issue 1, article id. 012046 (2018).

sci-hub.se/10.1088/1742-6596/1005/1/012046

Observations of a high-quality quasi-periodic rapidly-propagating wave train using SDO/AIA

G. **Nistico**, D. J. Pascoe, V. M. Nakariakov

E-print, June 2014; A&A

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

7-8 Dec – буря (Dst~71) и флорбуш от эрупции 4-ого

7-13 Dec

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>

8 Dec

Photospheric Flow Field Related to the Evolution of the Sun's Polar Magnetic Patches Observed by Hinode SOT

Anjali John **Kaithakkal**, **Y. Suematsu**, **M. Kubo**, **Y. Iida**, **D. Shiota**, **S. Tsuneta**

ApJ, 2015

<http://arxiv.org/pdf/1412.8023v1.pdf>

10-13 Dec

Determination of Differential Emission Measure from Solar Extreme Ultraviolet Images

Yang [Su](#)^{1,2}, Astrid M. Veronig³, Iain G. Hannah⁴, Mark C. M. Cheung⁵, Brian R. Dennis⁶, Gordon D. Holman⁶, Weiqun Gan^{1,2}, and Youping Li¹

2018 ApJL 856 L17

<http://iopscience.iop.org/article/10.3847/2041-8213/aab436/pdf>

11 Dec

Photospheric Flow Field Related to the Evolution of the Sun's Polar Magnetic Patches Observed by Hinode SOT

Anjali John [Kaithakkal](#), [Y. Suematsu](#), [M. Kubo](#), [Y. Iida](#), [D. Shiota](#), [S. Tsuneta](#)

ApJ, 2015

<http://arxiv.org/pdf/1412.8023v1.pdf>

12 Dec - ~03 UT: эрупция SW волокна, небольшой II тип

~05-07 UT: более крупная эрупция SE волокна с длительной ПЭ фазой;
медленно дрейфующий континуум

Multi-Scale Image Preprocessing and Feature Tracking for Remote CME Characterization

[Oleg Stepanyuk](#), [Kamen Kozarev](#), [Mohamed Nedal](#)

Journal of Space Weather and Space Climate 2022

<https://arxiv.org/pdf/2205.15088.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

The Coronal Analysis of SHocks and Waves (CASHeW) Framework

K. [Kozarev](#), [A. Davey](#), [A. Kendrick](#), [M. Hammer](#), [C. Keith](#)

Journal of Space Weather and Space Climate (SWSC) 2017

<https://arxiv.org/pdf/1710.05302.pdf>

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>

15 Dec **залимбовый пересвет** 22:16 ←16s 8s→ B=46/278=0.17 **<0.2 не берём**

14 Dec

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
XXV European Cosmic Ray Symposium, Turin, Sept. 4-9 2016 2016

<https://arxiv.org/pdf/1612.08900v1.pdf>

15 Dec - солнечный ветер и форбуш от КД и/или от эрупции 12-ого
CMEs in the Heliosphere: I. A Statistical Analysis of the Observational Properties of CMEs Detected in the Heliosphere from 2007 to 2017 by STEREO/HI-1

[R. A. Harrison](#), [J. A. Davies](#), [D. Barnes](#), [J. P. Byrne](#), [C. H. Perry](#), [V. Bothmer](#), [J. P. Eastwood](#), [P. T. Gallagher](#), [E. K. J. Kilpua](#), [C. Möstl](#), [L. Rodriguez](#), [A. P. Rouillard](#), [D. Odstrcil](#)
Solar Phys. **2018**
<https://arxiv.org/ftp/arxiv/papers/1804/1804.02320.pdf>

17-22 Dec

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>

Deep-learning Reconstruction of Sunspot Vector Magnetic Fields for Forecasting Solar Storms

Dattaraj B. **Dhuri**^{1,2}, Shamik Bhattacharjee¹, Shravan M. Hanasoge^{1,2}, and Sashi Kiran Mahapatra¹
2022 ApJ 939 64

<https://iopscience.iop.org/article/10.3847/1538-4357/ac9413/pdf>

Successive Injection of Opposite Magnetic Helicity in Solar Active Region NOAA 11928

P. **Vemareddy**, P. Démoulin

A&A 597, A104 (2017)

<https://arxiv.org/pdf/1611.00699v1.pdf>

<http://www.aanda.org/articles/aa/pdf/2017/01/aa29282-16.pdf>

19 Dec – 23:21 – M3.5 **вспышка**; **пересвет** на STEREO-B: $B=18 \cdot 2/276=0,13$

19 Dec – 23:19: относительно короткая M3.5 **вспышка** в AR 11931 [S14E68]

Relation of Coronal Rain Originating from Coronal Condensations to Interchange Magnetic Reconnection

Leping **Li**^{1,2,3}, Hardi Peter⁴, Lakshmi Pradeep Chitta⁴, and Hongqiang Song²

2020 ApJ 905 26

<https://doi.org/10.3847/1538-4357/abc68c>

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>

20 Dec – 12:16 – M1.6 **пересвет** $B=24 \cdot 2/276=0,17 \leftarrow 16s \quad 8s \rightarrow B=24/276=0,087$

23 Dec – 00:16 – M1.3 **пересвет** $A=14 \cdot 2/313=0,09 \leftarrow 16s \quad 8s \rightarrow A=14/313=0,045$
09:06 – M1.6 **вспышка**; **пересвет** на STEREO-A: $A=19 \cdot 2/313=0,12$

23 Dec

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>

24 Dec

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>

25 Dec

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

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>

26 Dec – небольшие плавные протоны от далёкой вспышки на обратной стороне
A large **back-sided** hyder flare which began at 02:46 UTC (located to the south of the southernmost part of a large coronal hole) was associated with an increase in proton levels and a large CME.

The effect of stream interaction regions on ICME structures observed in longitudinal conjunction

Reka M. [Winslow](#), [Camilla Scolini](#), [Noé Lugaz](#), [Antoinette B. Galvin](#)

ApJ **2021**

<https://arxiv.org/pdf/2105.10602.pdf>

Long-lasting injection of solar energetic electrons into the heliosphere

N. [Dresing](#)¹, R. Gómez-Herrero², B. Heber¹, A. Klassen¹, M. Temmer³ and A. Veronig³

A&A 613, A21 (**2018**)

<https://www.aanda.org/articles/aa/pdf/2018/05/aa31573-17.pdf>

<http://sci-hub.tw/https://www.aanda.org/articles/aa/abs/2018/05/aa31573-17/aa31573-17.html>

Catalogue of >55 MeV Wide-longitude Solar Proton Events Observed by SOHO, ACE, and the STEREOs at ≈1 AU During 2009 – 2016

Miikka [Paasilta](#), [Athanasios Papaioannou](#), [Nina Dresing](#), [Rami Vainio](#)...

Solar Physics April **2018**, 293:70

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1284-7.pdf>

27 Dec

Detection of decayless oscillations in solar transition region loops L4

Yuhang [Gao](#), Zhenyong Hou, Tom Van Doorsselaere and Mingzhe Guo

A&A Letter Volume 681, January **2024**

<https://doi.org/10.1051/0004-6361/202348702>

<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

Dynamics in the transition region beneath active region upflows viewed by IRIS

[Zhenghua Huang](#), [Lidong Xia](#), [Hui Fu](#), [Zhenyong Hou](#), [Ziyuan Wang](#)

ApJ **2021**

<https://arxiv.org/pdf/2107.01577.pdf>

Velocity Response of the Observed Explosive Events in the Lower Solar Atmosphere: I. Formation of the Flowing Cool Loop System

A.K. [Srivastava](#), [Yamini K. Rao](#), [P. Konkol](#), [K. Murawski](#), [M. Mathioudakis](#), [Sanjiv K. Tiwari](#), [E. Scullion](#), [J.G. Doyle](#), [B.N. Dwivedi](#)

ApJ **2020**

<https://arxiv.org/pdf/2004.02775.pdf>

Plasma flows in the cool loop systems

Yamini K. [Rao](#), [Abhishek K. Srivastava](#), [Pradeep Kayshap](#), [Klaus Wilhelm](#), [Bhola N. Dwivedi](#)

ApJ 2019

<https://arxiv.org/pdf/1902.05237.pdf>

Cool transition region loops observed by the Interface Region Imaging Spectrograph

Zhenghua [Huang](#), [Lidong Xia](#), [Bo Li](#), [Maria S. Madjarska](#)

ApJ 2015

<http://arxiv.org/pdf/1507.07594v1.pdf>

28 Dec - MINOR RADIATION STORM IN PROGRESS после 18 UT: Energetic **protons** (~20 pfu) are swarming around Earth following a magnetic eruption near the western limb of the sun: movie

(http://www.spaceweather.com/images2013/28dec13/cme_anim.gif?PHPSESSID=t8ut41e6735sr1u37gshnsb771).

Примерно в это же время (18:02) C9.3/SN вспышка в AR 1956 (S18E07)

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>

Excitation and Damping of Slow Magnetosonic Waves in Flaring Hot Coronal Loops: Effects of Compressive Viscosity

[Leon Ofman](#), [Tongjiang Wang](#)

ApJ 2021

<https://arxiv.org/pdf/2111.10696.pdf>

Determination of transport coefficients by coronal seismology of flare-induced slow-mode waves: Numerical parametric study of 1D loop model

Tongjiang [Wang](#), [Leon Ofman](#)

ApJ 2019

<https://arxiv.org/pdf/1909.10910.pdf>

A Survey of Changes in Magnetic Helicity Flux on the Photosphere During Relatively Low Class Flares

Yi [Bi](#), [Ying D Liu](#), [Yanxiao Liu](#), [Jiayan Yang](#), [Zhe Xu](#), [Kaifan Ji](#)

ApJ 2018

<https://arxiv.org/pdf/1808.04591.pdf>

Effect of transport coefficients on excitation of flare-induced standing slow-mode waves in coronal loops

[Tongjiang Wang](#), [Leon Ofman](#), [Xudong Sun](#), [Sami K Solanki](#), [Joseph M Davila](#)

ApJ 2018

<https://arxiv.org/pdf/1805.03282.pdf>

The Wind/EPACT proton event catalog (1996-2016)

Rositsa [Miteva](#), [Susan W. Samwel](#), [Marcus V. Costa-Duarte](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1801.00469.pdf> File

Evidence of thermal conduction suppression in hot coronal loops: Supplementary results
Tongjiang [Wang](#), Leon Ofman, Xudong Sun, Elena Provornikova, Joseph M. Davila
Proceedings of IAUS 320, **2015**
<http://arxiv.org/pdf/1510.02750v1.pdf>

Evidence of thermal conduction suppression in a solar flaring loop by coronal seismology of slow-mode waves
Tongjiang [Wang](#), Leon Ofman, [Xudong Sun](#), [Elena Provornikova](#), [Joseph M. Davila](#)
ApJL **2015**
<http://arxiv.org/pdf/1509.00920v1.pdf>

28-30 Dec

The effect of stream interaction regions on ICME structures observed in longitudinal conjunction
Reka M. [Winslow](#), [Camilla Scolini](#), [Noé Lugaz](#), [Antoinette B. Galvin](#)
ApJ **2021**
<https://arxiv.org/pdf/2105.10602.pdf>

29 Dec – A filament eruption was observed beginning at 06:39 UTC to the south of AR 11938.
-- 07:56 M3.1/1N flare в той же AR 1956 (S18E01), S5~180 без скачка в протонах

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>

30 Dec залимбовый пересвет 20:16 $\leftarrow 16s$ $8s \rightarrow B=40/277=0.14$ **<0.2 не берём**
Рядом меньше

31 Dec - New region S2976 [S07E86] produced a major flare. C5+ flare: long duration C8.8 peaking at 11:50 UT
- 21:58 UT, sunspot AR1936 (S16W35) erupted, producing a strong M6/2N-class flare, корональная волна, **304 A**, западная всышка с **S5~260, без метров и без протонов.**

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>

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>

Getting it all from spectra! Measuring velocities in the early stages of an eruption using the wide slot data from Hinode EIS
Louise [Harra](#), George Doschek, Sarah Matthews, Harry Warren, Len Culhane, Magnus Woods
Hinode/EIS Nugget Jan **2018**
http://solarb.mssl.ucl.ac.uk/SolarB/nuggets/nugget_2018jan.jsp

Disintegration of an Eruptive Filament via Interactions with Quasi-Separatrix Layers

Rui [Liu](#), [Jun Chen](#), [Yuming Wang](#)

SCIENCE CHINA Physics, Mechanics & Astronomy

2017

<https://arxiv.org/pdf/1712.02901.pdf>

Measuring Velocities in the Early Stage of an Eruption: Using "Overlappogram" Data from Hinode EIS

Louise K. [Harra](#)¹, Hirohisa Hara², George A. Doschek³, Sarah Matthews¹, Harry Warren³, J. Leonard Culhane¹, and Magnus M. Woods¹

2017 ApJ 842 58

<http://sci-hub.cc/10.3847/1538-4357/aa7411>

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 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>