

2014

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

ftp://ftp.sec.noaa.gov/pub/warehouse/2014/2014_plots/xray/
ftp://ftp.sec.noaa.gov/pub/warehouse/2014/2014_plots/proton/

1 Jan – 18:52 – M9.9/2B вспышка в AR1936 (S14W47), очень похожа по профилю рентгена на вспышку 31-ого из той же области. **Без радио и без протонов.**
The movie shows a dark filament of plasma racing away from the blast site, but most of the material fell back to the stellar surface. **304 A.**

- Форбуш и бурька от большой экваториальной КД.
- Вечером небольшая эрупция SE волокна

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>

Machine learning correlation of SDO/AIA EUV images to GOES/XRS X-ray flare magnitudes

Kiera van der **Sande**, Natasha Flyer, Thomas Berger, and Riana Gagnon

Front. Astron. Space Sci. 9:1031211. **2022**

<https://www.frontiersin.org/articles/10.3389/fspas.2022.1031211/pdf>

<https://doi.org/10.3389/fspas.2022.1031211>

Automatic detection technique for solar filament oscillations in GONG data

M. **Luna**^{1,2}, J. R. Mérou Mestrel^{1,2} and F. Auchère³

A&A 666, A195 (**2022**)

<https://www.aanda.org/articles/aa/pdf/2022/10/aa44181-22.pdf>

<https://arxiv.org/pdf/2209.05087.pdf>

LUCI onboard Lagrange, the Next Generation of EUV Space Weather Monitoring

M.J. **West**, [C. Kintziger](#), [M. Haberreiter](#), [M. Gyo](#), [D. Berghmans](#), [S. Gissot](#), [V Büchel](#), [L. Golub](#), [S. Shestov](#), [J.A. Davies](#)

Journal of Space Weather and Space Climate **2020**

<https://arxiv.org/pdf/2009.04788.pdf>

GONG Catalog of Solar Filament Oscillations Near Solar Maximum

Manuel **Luna**, [Judith Karpen](#), [José Luís Ballester](#), [Karin Muglach](#), [Jaume Terradas](#), [Therese Kucera](#), [Holly Gilbert](#)

Astrophysical Journal Supplement Series **2018**

<https://arxiv.org/pdf/1804.03743.pdf>

Doppler speeds of the hydrogen Lyman lines in solar flares from EVE

Stephen A **Brown**, Lyndsay Fletcher, Nicolas Labrosse

A&A **2016**

<https://arxiv.org/pdf/1610.04007v1.pdf>

The Energetics of White-light Flares Observed by SDO/HMI and RHESSI

Nengyi **Huang**, Yan Xu, Haimin Wang

Research in Astronomy and Astrophysics 2016

<http://arxiv.org/pdf/1608.06015v1.pdf>

Observations and modelling of Helium lines in solar flares

Paulo J. A. **Simões**, Lyndsay Fletcher, Nicolas Labrosse, Graham S. Kerr

Proceedings of the Coimbra Solar Physics Meeting 2015: Ground-based Solar Observations in the Space Instrumentation Era; Astronomical Society of the Pacific Conference Series 2015

<http://arxiv.org/pdf/1512.03477v1.pdf>

The Helioseismic and Magnetic Imager (HMI) Vector Magnetic Field Pipeline: Magnetohydrodynamics Simulation Module for the Global Solar Corona

Keiji **Hayashi**, [J. Todd Hoeksema](#), [Yang Liu](#), [Monica G. Bobra](#), [Xudong D. Sun](#), [Aimee A. Norton](#)

Solar Phys. 2015

<http://arxiv.org/pdf/1504.05217v1.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>

Formation of Compound Flux Rope by The Merging of Two Filament Channels, Associated Dynamics and its Stability

Navin Chandra **Joshi**, Tetsuya Magara, Satoshi Inoue

ApJ, 2014

<http://arxiv.org/pdf/1409.1359v1.pdf>

2 Jan – 02:41, M1.7, пересвет, STEREO-B $B=9*2/277=0,06$ сомнительный

22:16, M1.2, пересвет, STEREO-B $B=10*2/277=0,072$ ←16s 8s→

$B=10/277=0,036$

2-? Jan – существенное повышение активности в связи с прохождением крупной АО 1944.

Giant sunspot AR1944 has developed a 'beta-gamma-delta' magnetic field that harbors energy for potent Earth-directed eruptions. Шумовая буря.

2 Jan

Statistics of "Cold" Early Impulsive Solar Flares in X-ray and Microwave domains

Alexandra L. **Lysenko**, [Alexander T. Altyntsev](#), [Natalia S. Meshalkina](#), [Dmitriy Zhdanov](#), [Gregory D. Fleishman](#)

2018

<https://arxiv.org/pdf/1802.09288.pdf>

3-10 Jan

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>

4 Jan – 19:46: **M4.0** вспышка, [S09E<37], S3~550; слабые, медленно нарастающие протоны.

A full **halo CME** blasted away from the sun during the late hours of Jan 4th following a long-duration M4-class solar flare from big sunspot AR1944

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

Donald V. Reames

Space Sci. Rev 2022

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

The source of the major solar energetic particle events from super active region 11944

David H. Brooks^{1,*} and Stephanie L. Yardley²

Science Advances 03 Mar 2021: Vol. 7, no. 10, eabf0068

DOI: 10.1126/sciadv.abf0068

<https://advances.sciencemag.org/content/7/10/eabf0068/tab-pdf>

5 Jan

Explainable Deep Learning-based Solar Flare Prediction with post hoc Attention for Operational Forecasting

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

the 26th International Conference on Discovery Science (DS2023) 2023

<https://arxiv.org/pdf/2308.02682.pdf>

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>

5-12 Jan

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

Donald V. Reames

Space Sci. Rev 2022

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

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David H. Brooks^{1,*} and Stephanie L. Yardley²

Science Advances 03 Mar 2021: Vol. 7, no. 10, eabf0068 **File**

DOI: 10.1126/sciadv.abf0068

<https://advances.sciencemag.org/content/advances/7/10/eabf0068.full.pdf>

<https://arxiv.org/ftp/arxiv/papers/2103/2103.13621.pdf>

A new method to quantify and reduce projection error in whole-solar-active-region parameters measured from vector magnetograms

David A. Falconer, Sanjiv K. Tiwari, Ronald L. Moore, Igor Khazanov

ApJL 2017

<https://arxiv.org/pdf/1612.01948v1.pdf>

6 Jan - 07:55: залимбовый **пересвет** на STEREO-A, и частично на B

6 Jan - AR 1937 **behind** the southwest limb produced a **large proton flare** which peaked at 07:45 UTC (**J10~25 pfu**). **Gamma** This event was associated with a halo CME. **GLE72(?) event**

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>

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

Donald V. **Reames**

Space Sci. Rev. 2022

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

Calibration of the GOES 6–16 high-energy proton detectors based on modelling of ground level enhancement energy spectra

Shaowen **Hu**^{1*} and Edward Semones²

J. Space Weather Space Clim. 2022, 12, 5

<https://www.swsc-journal.org/articles/swsc/pdf/2022/01/swsc210063.pdf>

<https://doi.org/10.1051/swsc/2022003>

The source of the major solar energetic particle events from super active region 11944

David H. **Brooks**^{1,*} and Stephanie L. Yardley²

Science Advances 03 Mar 2021: Vol. 7, no. 10, eabf0068

DOI: 10.1126/sciadv.abf0068

<https://advances.sciencemag.org/content/7/10/eabf0068/tab-pdf>

<https://www.science.org/doi/pdf/10.1126/sciadv.abf0068>

Coronal Elemental Abundance: New Results from Soft X-Ray Spectroscopy of the Sun

[Shyama Narendranath](#), [P. Sreekumar](#), [Netra S. Pillai](#), [Singam Panini](#), [K Sankarasubramanian](#) & [Juhani Huovelin](#)

[Solar Physics](#) volume 295, Article number: 175 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01738-5.pdf>

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>

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

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>

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

Formation and eruption of sigmoidal structure from a weak field region of NOAA 11942

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

ApJ **2019**
<https://arxiv.org/pdf/1902.08105.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

Assessment of spectral and angular characteristics of sub-GLE events using the global neutron monitor network

Alexander [Mishev](#)^{1*}, Stepan Poluianov^{1,2} and Ilya Usoskin^{1,2}

J. Space Weather Space Clim. **2017**, 7, A28

<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170026.pdf>

Ground level enhancements of cosmic rays in solar cycle 24

M V [Kravtsova](#) and V E Sdobnov

[Astronomy Letters](#) July **2017**, Volume 43, [Issue 7](#), pp 501–506

АНАЛИЗ GLE 6 ЯНВАРЯ 2014 Г

[СДОБНОВ](#) В.Е.

ИЗВЕСТИЯ РОССИЙСКОЙ АКАДЕМИИ НАУК. СЕРИЯ ФИЗИЧЕСКАЯ

Том: 81Номер: 2 Год: **2017** Страницы: 140-142

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>

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>

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>

Small Ground-Level Enhancement of 6 January 2014: Acceleration by CME-Driven Shock?

C. [Li](#), L. I. Miroshnichenko, V. E. Sdobnov

Solar Phys. **2016**

Relations Between Microwave Bursts and Near-Earth High-Energy Proton Enhancements and Their Origin

V. V. [Grechnev](#), V. I. Kiselev, N. S. Meshalkina, I. M. Chertok
Solar Phys. Volume 290, Issue 10, pp. 2827-2855 2015
<http://arxiv.org/pdf/1511.05839v1.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**

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

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>

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

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

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

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

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>

Proton intensity spectra during the solar energetic particle events of May 17, 2012 and January 6, 2014

P. [Kühl](#), S. Banjac, N. Dresing, R. Gómez-Herrero, B. Heber, A. Klassen and C. Terasa
2014 A&A, 576, A120

Ground Level Enhancement in the 2014 January 6 Solar Energetic Particle Event

N. [Thakur](#), N. Gopalswamy, H. Xie, P. Makela, S. Yashiro, S. Akiyama, J.M. Davila
E-print, July 2014; **File**; ApJL 2014 790 L13
<http://arxiv.org/pdf/1406.7172v2.pdf>

Major Solar Eruptions and High Energy Particle Events during Solar Cycle 24

N. [Gopalswamy](#), H. Xie, S. Akiyama, P. Makela, S. Yashiro
2014, Earth, Planets, and Space, **File**
<http://arxiv.org/pdf/1408.3617v1.pdf>

6-8-11 Jan

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>

The source of the major solar energetic particle events from super active region 11944

David H. **Brooks**^{1,*} and Stephanie L. Yardley²

Science Advances 03 Mar 2021: Vol. 7, no. 10, eabf0068

DOI: 10.1126/sciadv.abf0068

<https://advances.sciencemag.org/content/7/10/eabf0068/tab-pdf>

Structure and Evolution of an Inter-Active Region Large-scale Magnetic Flux Rope

Aiying **Duan**¹, Chaowei Jiang², Peng Zou², Xueshang Feng², and Jun Cui¹

2021 ApJ 906 45

<https://doi.org/10.3847/1538-4357/abc701>

Four Distinct Pathways to the Element Abundances in Solar Energetic Particles **Review**

Donald V. **Reames**

Space Sci. Rev Volume 216, Issue 2, article id.20 2019

<https://arxiv.org/ftp/arxiv/papers/1912/1912.06691.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>

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

T. Alberti¹, M. Laurenza², E. W. Cliver³, M. Storini², G. Consolini², and F. Lepreti

2017 ApJ 838 59 File

<https://iopscience.iop.org/article/10.3847/1538-4357/aa5cb8/pdf>

7 Jan - 22:16: C7.4 **пересвет** $A=12.5 \cdot 2/313 = 0,08 \leftarrow 16s \ 8s \rightarrow A=12.5/313 = 0,04$

7 Jan – 10:13: довольно короткая **M7.2/2B** вспышка в AR 1944 (S13E11), с **мощными микроволнами (S9~5900)**

-- 18:32: более продолжительная **X1.2/2N** вспышка из соседней AR 1943 (S15W11; ПЭ аркада в слабом поле, димминги незначительные) с **сильными микроволнами и более мягким спектром**

(S3~8300), II тип; A fast halo CME (exit speed near 2500 km/s) was observed in LASCO and STEREO imagery. **Weak sustained gamma.**

После 19 UT **значительное протонное возрастание**

-- A weak solar wind shock was observed at 14:24 at SOHO, the arrival of the CME observed on January 4. Небольшой форбуш.

Solar Wind With Field Lines and Energetic Particles (SOFIE) Model: Application to Historical Solar Energetic Particle Events

Lulu **Zhao**, [Igor Sokolov](#), [Tamas Gombosi](#), [David Lario](#), [Kathryn Whitman](#), [Zhenguang Huang](#), [Gabor Toth](#), [Ward Manchester](#), [Bart van der Holst](#) ... [See all authors](#)

Space Weather [Volume22, Issue9](#) September 2024 e2023SW003729

<https://doi.org/10.1029/2023SW003729>
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2023SW003729>

Non-Neutralized Electric Currents as a Proxy for Eruptive Activity in Solar Active Regions

Y. LIU¹, T. TOROK², V. S. TITOV², J. E. LEAKE³, X. SUN (孙旭东)⁴, AND M. JIN

ApJ 2023

http://sun.stanford.edu/~yliu/papers/neutralization_finalVersion.pdf

Solar Wind with Field Lines and Energetic Particles (SOFIE) Model: Application to Historical Solar Energetic Particle Events

Lulu Zhao, Igor Sokolov, Tamas Gombosi, David Lario, Kathryn Whitman, Zhenguang Huang, Gabor Toth, Ward Manchester, Bart van der Holst, Nishtha Sachdeva

Space Weather 2023

<https://arxiv.org/pdf/2309.16903.pdf>

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

Donald V. Reames

Space Sci. Rev 2022

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

Magnetic field re-configuration associated with a slow rise eruptive X1.2 flare in NOAA active region 11944

Vasyl Yurchyshyn, Xu Yang, Gelu Nita, Gregory Fleishman, Valentina Abramenko, Satoshi Inoue, Eun-Kyung Lim, and Wenda Cao

Front. Astron. Space Sci. 9:816523 2022

<https://www.frontiersin.org/articles/10.3389/fspas.2022.816523/full>

<https://doi.org/10.3389/fspas.2022.816523>

http://www.bbo.njit.edu/~vayur/ar11944_final.pdf File

Signature and escape of highly fractionated plasma in an active region

David H. Brooks, Stephanie L. Yardley

MNRAS Volume 508, Issue 2, December 2021, Pages 1831–1841,

<https://doi.org/10.1093/mnras/stab2681>

<https://arxiv.org/pdf/2109.11157.pdf>

Flux emergence and generation of flare-productive active regions

Shin Toriumi

Advances in Space Research 2021

<https://arxiv.org/pdf/2105.09961.pdf>

The source of the major solar energetic particle events from super active region 11944

David H. Brooks^{1,*} and Stephanie L. Yardley²

Science Advances 03 Mar 2021: Vol. 7, no. 10, eabf0068

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<https://advances.sciencemag.org/content/7/10/eabf0068/tab-pdf>

<https://www.science.org/doi/pdf/10.1126/sciadv.abf0068>

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2021 ApJ 906 45

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Small Size Ground Level Enhancements During Solar Cycle 24

Leonty I. Miroshnichenko, Chuan Li & Victor G. Yanke

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

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

10:13 M7.3 flare **Hot X-ray Onsets of Solar Flares**

[Hugh S. Hudson](#), [Paulo J. A. Simoes](#), [Lyndsay Fletcher](#), [Laura A. Hayes](#), [Iain G. Hannah](#)

MNRAS 2020

<https://arxiv.org/pdf/2007.05310.pdf>

A New Parameter of the Photospheric Magnetic Field to Distinguish Eruptive-flare Producing Solar Active Regions

Pei Hsuan [Lin](#)¹, Kanya Kusano¹, Daikou Shiota², Satoshi Inoue¹, K. D. Leka^{1,3}, and Yuta Mizuno¹

2020 ApJ 894 20

<https://iopscience.iop.org/article/10.3847/1538-4357/ab822c/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 Volume 18, Issue 7, article id. e02331 2020

<https://arxiv.org/pdf/1910.01364.pdf>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2019SW002331>

Reconstruction of a Highly Twisted Magnetic Flux Rope for an Inter-active-region X-Class Solar Flare

Chaowei [Jiang](#)^{1*}, Aiyong Duan², Xueshang Feng³, Peng Zou¹, Pingbing Zuo¹ and Yi Wang¹

Front. Astron. Space Sci. 6:63 2019

<https://www.frontiersin.org/articles/10.3389/fspas.2019.00063/pdf>

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

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

ApJ Volume 884, Issue 1, article id. 73, 2019

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

<https://iopscience.iop.org/article/10.3847/1538-4357/ab3e33/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 879 90 2019

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

<https://iopscience.iop.org/article/10.3847/1538-4357/ab258f/pdf>

Temporal Evolution of Heavy-Ion Spectra in Solar Energetic Particle Events

Donald J. [Doran](#), Silvia Dalla, Peter Zelina

[Solar Physics](#) May 2019, 294:55

<https://link.springer.com/content/pdf/10.1007/s11207-019-1431-9.pdf>

Plasma Motion inside Flaring Regions Revealed by Doppler Shift Information from SDO/EVE Observations

Zhixun [Cheng](#)^{1,2}, Yuming Wang^{1,2}, Rui Liu^{1,2}, Zhenjun Zhou^{2,3}, and Kai Liu^{1,2}

2019 ApJ 875 93

<https://iopscience.iop.org/article/10.3847/1538-4357/ab0f2d/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

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>

Lyman Continuum Observations of Solar Flares Using SDO/EVE

Marcos E. **Machado**, **Ryan O. Milligan**, **Paulo J. A. Simoes**

ApJ Volume 869, Issue 1, article id. 63 2018

<https://arxiv.org/pdf/1810.10824.pdf>

<https://iopscience.iop.org/article/10.3847/1538-4357/aaec6e/pdf>

Extreme Kinematics of the 2017 September 10 Solar Eruption and the Spectral Characteristics of the Associated Energetic Particles

N. **Gopalswamy**, **S. Yashiro**, **P. Makela**, **H. Xie**, **S. Akiyama**, **C. Monstein**

ApJL 863:L39 2018

<https://arxiv.org/ftp/arxiv/papers/1807/1807.09906.pdf>

<https://iopscience.iop.org/article/10.3847/2041-8213/aad86c/pdf>

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David **Webb**, Nariaki Nitta

Solar Physics October 2017, 292:142 File

<https://link.springer.com/content/pdf/10.1007/s11207-017-1166-4.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>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth: 2. Geomagnetic response

N. P. **Savani**, A. Vourlidas, I. G. Richardson, A. Szabo, B. J. Thompson, A. Pulkkinen, M. L. Mays, T. Nieves-Chinchilla, V. Bothmer

Space Weather Volume 15, Issue 2 February 2017 Pages 441–461 DOI: 10.1002/2016SW001458

<http://onlinelibrary.wiley.com/doi/10.1002/2016SW001458/full>

<http://sci-hub.cc/10.1002/2016SW001458>

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 2017 834 56

<https://arxiv.org/pdf/1611.05047v1.pdf>

<https://iopscience.iop.org/article/10.3847/1538-4357/834/1/56/pdf>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth:

2. Geomagnetic response: BZ VALIDATION

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

Space Weather Volume 15, Issue 2 February 2017 Pages 441–461 DOI: 10.1002/2016SW001458

<http://onlinelibrary.wiley.com/doi/10.1002/2016SW001458/full>

<http://sci-hub.cc/10.1002/2016SW001458>

Doppler speeds of the hydrogen Lyman lines in solar flares from EVE

Stephen A **Brown**, Lyndsay Fletcher, Nicolas Labrosse

A&A 596, A51 2016
<https://arxiv.org/pdf/1610.04007v1.pdf>

The Energetics of White-light Flares Observed by SDO/HMI and RHESSI

Nengyi **Huang**, Yan Xu, Haimin Wang
Research in Astronomy and Astrophysics 2016
<http://arxiv.org/pdf/1608.06015v1.pdf>

Properties and Modeling of Unresolved Fine Structure Loops Observed by IRIS

David H. **Brooks**, Jeffrey W. Reep, Harry P. Warren
ApJ 2016
<http://arxiv.org/pdf/1606.05440v1.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

Slipping magnetic reconnections with multiple flare ribbons during an X-class solar flare

Ruisheng **Zheng**, Yao Chen, Bing Wang
ApJ 2016
<http://arxiv.org/pdf/1604.04982v1.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 823 136 2016
<http://arxiv.org/pdf/1602.07244v1.pdf>
<https://iopscience.iop.org/article/10.3847/0004-637X/823/2/136/pdf>

ПРЕДВСПЫШЕЧНАЯ ДИНАМИКА МИКРОВОЛНОВОГО ИЗЛУЧЕНИЯ И МАГНИТНОГО ПОЛЯ АКТИВНЫХ ОБЛАСТЕЙ СОЛНЦА

Абрамов-Максимов В.Е.1, Боровик В.Н.1, Опейкина Л.В.2, Тлатов А.Г.
«Солнечная и солнечно-земная физика – 2015» с. 7

Relations Between Microwave Bursts and Near-Earth High-Energy Proton Enhancements and Their Origin

V. V. **Grechnev**, V. I. Kiselev, N. S. Meshalkina, I. M. Chertok
Solar Phys. Volume 290, Issue 10, pp. 2827-2855 2015
<http://arxiv.org/pdf/1511.05839v1.pdf>
<https://link.springer.com/content/pdf/10.1007/s11207-015-0797-6.pdf>

The role of active region coronal magnetic field in determining coronal mass ejection propagation direction

Rui **Wang**, Ying D. Liu, Xinghua Dai, Zhongwei Yang, Chong Huang, Huidong Hu
ApJ 814 80 2015
<http://arxiv.org/pdf/1510.06177v1.pdf>
<https://iopscience.iop.org/article/10.1088/0004-637X/814/1/80/pdf>

Propagation of the 7 January 2014 CME and Resulting Geomagnetic Non-Event

M. L. **Mays**, B. J. Thompson, L. K. Jian, R. C. Colaninno, D. Odstrcil, C. Möstl, M. Temmer, N. P. Savani, A. Taktakishvili, P. J. MacNeice, Y. Zheng
2015 Astrophysical Journal, Volume 812, Issue 2, article id. 145, 15 pp.
<http://arxiv.org/pdf/1509.06477v1.pdf>
https://ui.adsabs.harvard.edu/link_gateway/2015ApJ...812..145M/PUB_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>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

1. Initial architecture

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

Space Weather , Volume 13, Issue 6 June 2015 Pages 374–385,

<http://arxiv.org/pdf/1502.02067v1.pdf> **File**

<http://onlinelibrary.wiley.com/doi/10.1002/2015SW001171/full>

Strong coronal channelling and interplanetary evolution of a solar storm up to Earth and Mars

Christian [Möstl](#), Tanja Rollett, Rudy A. Frahm, Ying D. Liu, David M. Long, Robin C. Colaninno, Martin A. Reiss, Manuela Temmer, Charles J. Farrugia, Arik Posner, Mateja Dumbović, Miho Janvier, Pascal Démoulin, Peter Boakes, Andy Devos, Emil Kraaikamp, Mona L. Mays, Bojan Vrsnak

Nature Communications **6**, Article number: 7135 **2015**

<http://arxiv.org/pdf/1506.02842v1.pdf>

<https://www.nature.com/articles/ncomms8135.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>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

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

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

<http://arxiv.org/pdf/1502.02067v1.pdf>

Proton activity of the Sun in current solar cycle 24

Chuan [Li](#), Leonty Miroshnichenko, Cheng Fang

RAA (Research in Astronomy and Astrophysics), **2014**

<http://arxiv.org/pdf/1408.2308v1.pdf>

7 January 2014 Events - What Can We Learn? - AGU Session

Solar News, 1 Aug, 2014

<http://sun.stanford.edu/2014January/> - много данных

To make the challenge specific: what do you learn from the curious events of January 2014? A large sunspot group near disk center was associated with a strong solar proton event and on 7 January an X-class flare, but caused no significant geomagnetic response. Share your understanding of the global Sun, the origin of activity and storms, and the consequences for the heliosphere and Earth based on this or other recent events.

7-9 Jan

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>

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>

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David [Webb](#), Nariaki Nitta

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

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>

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_Event_List)

[http://solar.gmu.edu/heliophysics/index.php/The ISEST ICME%5CCME Lists](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_ICME%5CCME_Lists)

7-15 Jan

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 Jan - 03:46: M3.6 вспышка, **пересвет** на STEREO-A, $A=29 \times 2/313 = 0,19$

8 Jan – 03:47 - **импульсная** вспышка M3.6/SF, AR 1947 (N11W81), S3~100, type II

- **Протоны от вспышки 7-ого достигли J10~1000 pfu**

[http://solar.gmu.edu/heliophysics/index.php/The ISEST Event List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

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>

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

Review

Donald V. [Reames](#)

Space Sci. Rev 2022

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

Direct Observations of Traveling Ionospheric Disturbances as Focusers of Solar Radiation: Spectral Caustics

Artem [Koval](#), [Yao Chen](#), [Takuya Tsugawa](#), [Yuichi Otsuka](#), [Atsuki Shinbori](#), [Michi Nishioka](#), [Anatoliy Brazhenko](#), [Aleksander Stanislavsky](#), [Aleksander Konvalenko](#), [Qing-He Zhang](#), [Christian Monstein](#), [Roman Gorgutsa](#)

ApJ 2019

<https://arxiv.org/pdf/1904.09577.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>

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>

A new method to quantify and reduce projection error in whole-solar-active-region parameters measured from vector magnetograms

David A. **Falconer**, Sanjiv K. Tiwari, Ronald L. Moore, Igor Khazanov

ApJL 2017

<https://arxiv.org/pdf/1612.01948v1.pdf>

Investigating the Conditions of the Formation of a Type II Radio Burst on 2014 January 8

W. **Su**, X. Cheng, M. D. Ding, P. F. Chen, Z. J. Ning, H. S. Ji

2016

<http://arxiv.org/pdf/1609.05633v1.pdf>

The Formation and Early Evolution of a Coronal Mass Ejection and its Associated Shock Wave on 2014 January 8

Linfeng **Wan**, Xin Cheng, Tong Shi, Wei Su, M. D. Ding

ApJ 2016

<http://arxiv.org/pdf/1605.01132v1.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>

Small Ground-Level Enhancement of 6 January 2014: Acceleration by CME-Driven Shock?

C. **Li**, L. I. Miroshnichenko, V. E. Sdobnov

Solar Phys. 2016

Chromospheric sunspots in millimeter range as observed by Nobeyama Radioheliograph

Kazumasa **Iwai**, Hideki Koshiishi, Kiyoto Shibasaki, Satoshi Nozawa, Shun Miyawaki, Takuro Yoneya

ApJ 2015

<http://arxiv.org/pdf/1511.08991v1.pdf>

An observational revisit of band-split solar type-II radio bursts

Guohui **Du**, Xiangliang Kong, Yao Chen, Shiwei Feng, Bing Wang, Gang Li

2015

<http://arxiv.org/pdf/1509.03832v1.pdf>

8-10 Jan

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>

9 Jan – A CME от вспышки 7-ого hit Earth's magnetic field on Jan. 9th. The impact around 20:00 UTC was weaker than expected, and geomagnetic storming has been less than predicted. $B_z > 0$. Форбуш.

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>

Evidence For The Magnetic Breakout Model in an Equatorial Coronal-Hole Jet

Pankaj [Kumar](#), [Judith T. Karpen](#), [Spiro K. Antiochos](#), [Peter F. Wyper](#), [C. Richard DeVore](#), [Craig E. DeForest](#)

ApJ 2018

<https://arxiv.org/pdf/1801.08582.pdf>

Observations of Subarcsecond Bright Dots in the Transition Region above Sunspots with the Interface Region Imaging Spectrograph

H. [Tian](#), L. Kleint, H. Peter, M. Weber, P. Testa, E. DeLuca, L. Golub, N. Schanche
ApJL, 2014

<http://arxiv.org/pdf/1407.1060v1.pdf>

12 Jan - Earth is entering a fast stream of solar wind со скоростью до 800 км/с от крупной CH599;

$B_z \geq 0$, бури практически нет, продолжающийся небольшой форбуш

13 Jan 21:51 M1.3 spike+mini PE Jet Both eruptive and confined flare characteristics

A Solar Magnetic-fan Flaring Arch Heated by Non-thermal Particles and Hot Plasma from an X-ray Jet Eruption

[Kyoung-Sun Lee](#), [Hirohisa Hara](#), [Kyoko Watanabe](#), [Anand D. Joshi](#), [David H. Brooks](#), [Shinsuke Imada](#), [Avijeet Prasad](#), [Phillip Dang](#), [Toshifumi Shimizu](#), [Sabrina L. Savage](#), [Ronald Moore](#), [Navdeep K. Panesar](#), [Jeffrey W. Reep](#)

ApJ 2020

<https://arxiv.org/pdf/2005.09875.pdf>

A Hot Cusp-Shaped Confined Solar Flare

Aaron [Hernandez-Perez](#), [Yang Su](#), [Julia K. Thalmann](#), [Astrid M. Veronig](#), [Ewan C. Dickson](#), [Karin Dissauer](#), [Bhuwan Joshi](#), [Ramesh Chandra](#)

ApJ 2019

<https://arxiv.org/pdf/1911.10859.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>

14 Jan - 9 Feb CR 2146

Mapping Magnetic Field Lines for an Accelerating Solar Wind

S. [Tasnim](#), Iver H. Cairns, B. Li, M. S. Wheatland

[Solar Physics](#) November 2019, 294:155

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1541-4.pdf>

17 Jan

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>

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>

20 Jan - The most interesting event of the day was a long duration C3.6 event peaking at 22:49 UTC. Its source was a **filament eruption** near AR S3044 [S07E71]. An asymmetric halo CME was observed late in the day after a long duration C3 event involving AR 11963 and a filament eruption.

22 Jan - Solar wind speed at SOHO ranged between 408 and 584 km/s under the influence of a high speed stream from CH600. Без бури и форбуша.

The Center-to-Limb Variation of Non-Thermal Velocities using IRIS Si IV

[Yamini K. Rao](#), [Giulio Del Zanna](#), [Helen E. Mason](#)

MNRAS, 2022

<https://arxiv.org/pdf/2201.07290.pdf>

23 Jan

Stealth Non-standard-model Confined Flare Eruptions: Sudden Reconnection Events in Ostensibly Inert Magnetic Arches from Sunspots

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

ApJ 2024

<https://arxiv.org/pdf/2408.09021>

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>

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>

23-24 Jan

Statistical Study of Network Jets Observed in the Solar Transition Region: a Comparison Between Coronal Holes and Quiet-Sun Regions

Nancy [Narang](#), Rebecca T. Arbacher, Hui Tian, Dipankar Banerjee, Steven R. Cranmer,

Ed E. DeLuca, Sean McKillop

Solar Phys. 2016

<http://arxiv.org/pdf/1604.06295v1.pdf>

25 Jan

Interaction of a coronal mass ejection and a stream interaction region: A case study

Paul Geyer¹, Mateja Dumbović¹, Manuela Temmer², Astrid Veronig², Karin Dissauer³ and Bojan Vršnak¹

A&A 672, A168 (2023)

<https://doi.org/10.1051/0004-6361/202245433>

<https://www.aanda.org/articles/aa/pdf/2023/04/aa45433-22.pdf>

26 Jan

Imaging and Spectral Observations of a Type-II Radio Burst Revealing the Section of the CME-Driven Shock that Accelerates Electrons

Satabdwa Majumdar, Srikar Paavan Tadepalli, Samriddhi Sankar Maity, Ketaki Deshpande, Anshu Kumari, Ritesh Patel, Nat Gopalswamy

Solar Phys. 2021

<https://arxiv.org/pdf/2103.09536.pdf>

27 Jan - 22:16: M4.9 **пересвет** $B=30^2/278=0,22$ $\leftarrow 16s$ $8s \rightarrow$ **22:11** $B=20^2/278=0,144$

27 Jan - Active sunspot AR1944, which produced many strong flares earlier this month, has returned from a two-week trip around the farside of the sun.

The need for new techniques to identify the high-frequency MHD waves of an oscillating coronal loop

Farhad Allian, Rekha Jain

A&A 2021

<https://arxiv.org/pdf/2105.08189.pdf>

A New Analysis Procedure for Detecting Periodicities within Complex Solar Coronal Arcades

Farhad Allian, Rekha Jain, B.W Hindman

ApJ 2019

<https://arxiv.org/pdf/1902.06644.pdf>

Global Energetics of Solar Flares: III. Non thermal Energies

Markus J. Aschwanden, Gordon Holman, Aidan O'Flannagain, Amir Campi, James M. McTiernan, Eduard Konter

ApJ 2016

<http://arxiv.org/pdf/1607.06488v1.pdf>

27-28 Jan

Study of transverse oscillations in coronal loops excited by flares and eruptions

Sandra M. Conde C, Rekha Jain, Vera Jatenco-Pereira

ApJ 2022

<https://arxiv.org/pdf/2205.12063.pdf>

28 Jan – 07:31: M3.6 вспышка, **пересвет** на STEREO-B, $B=17^2/279=0,12$
11:41: M1.4 вспышка, **пересвет** на STEREO-B, $B=8^2/279=0,06$
12:51: M1.3 вспышка, **пересвет** на STEREO-B, $B=13^2/279=0,09$
15:26: M2.0 вспышка, **пересвет** на STEREO-B, $B=10,5^2/279=0,07$
19:41: M4.9 вспышка, **пересвет** на STEREO-B, $B=25,5^2/279=0,18$
22:16: M2.6 **пересвет** $B=27^2/279=0,19$ $\leftarrow 16s$ $8s \rightarrow B=27/279=0,097$

28 Jan

Signatures of Type III Solar Radio Bursts from Nanoflares: Modeling

[Sherry Chhabra](#), [James A. Klimchuk](#), [Dale E. Gary](#)

ApJ 922 128 2021

<https://arxiv.org/pdf/2109.03355.pdf>

<https://doi.org/10.3847/1538-4357/ac2364>

Excitation Sources of Oscillations in Solar Coronal Loops: A Multi-wavelength Analysis

Sandra M. [Conde](#) C.1,2, Rekha Jain³, and Vera Jatenco-Pereira¹

2020 ApJL 890 L21

<https://doi.org/10.3847/2041-8213/ab7348>

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>

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

29 Jan - A halo CME was observed after a **filament eruption** in the southwest quadrant. **Statistical Study of Network Jets Observed in the Solar Transition Region: a Comparison**

Categorization of Coronal Mass Ejection Driven Sheath Regions: Characteristics of STEREO Events

T. M. [Salman](#), [N. Lugaz](#), [R. M. Winslow](#), [C. J. Farrugia](#), [L. K. Jian](#), [A. B. Galvin](#)

ApJ 2021

<https://arxiv.org/pdf/2106.12076.pdf>

Between Coronal Holes and Quiet-Sun Regions

Nancy [Narang](#), Rebecca T. Arbacher, Hui Tian, Dipankar Banerjee, Steven R. Cranmer, Ed E. DeLuca, Sean McKillop

Solar Phys. 2016

<http://arxiv.org/pdf/1604.06295v1.pdf>

30 Jan - Big sunspot AR1967 unleashed a strong M6-class solar flare on Jan. 30th at approximately 1617 UTC. The explosion, which may be seen at the end of this movie of today's solar eclipse, hurled a full halo CME into space. Radio emissions from shock waves preceding the CME suggest that it could be leaving the sun faster than 2100 km/s (4.7 million mph).

A halo CME was observed after an M1 event in AR 11967 at 08:11 UTC. The CME was faint over the west limbs and the north pole. A much larger CME was observed after the M6 flare in AR 11967 at 16:11 UTC.

Inter-planetary type-IV solar radio bursts: A comprehensive **catalog and statistical results**

[Atul Mohan](#), [Nat Gopalswamy](#), [Anshu Kumari](#), [Sachiko Akiyama](#), [Sindhuja G](#)

ApJ 2024

<https://arxiv.org/pdf/2406.00194>

31 Jan - M1.1 flare at 15:42 UTC was associated with a **halo CME**.

Statistics of "Cold" Early Impulsive Solar Flares in X-ray and Microwave domains

Alexandra L. [Lysenko](#), [Alexander T. Altyntsey](#), [Natalia S. Meshalkina](#), [Dmitriy Zhdanov](#), [Gregory D. Fleishman](#)

2018

<https://arxiv.org/pdf/1802.09288.pdf>

Interaction of Two Active Region Filaments Observed by NVST and SDO

Liheng [Yang](#), Xiaoli Yan, Ting Li, [Zhike Xue](#), [Yongyuan Xiang](#)

ApJ 2017

<https://arxiv.org/pdf/1703.01712.pdf>

31 January-9 February 2014

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>

A year starting in February 2014

Lifecycle of a large-scale polar coronal pseudostreamer/cavity system

Chloé [Guennou](#)^{1, 2*}, Laurel A. Rachmeler³, Daniel B. Seaton^{3, 4, 5}, Frédéric Auchère⁶

Front. Astron. Space Sci. 2016 | doi: 10.3389/fspas.2016.00014

<http://journal.frontiersin.org/article/10.3389/fspas.2016.00014/abstract>

1 Feb

Observational Analysis of Lyman-alpha Emission in Equivalent Magnitude Solar Flares

[Harry J. Greatorex](#), [Ryan O. Milligan](#), [Phillip C. Chamberlin](#)

ApJ 2023

<https://arxiv.org/pdf/2306.16234.pdf>

Toward Filament Segmentation Using Deep Neural Networks

Azim [Ahmadzadeh](#), [Sushant S. Mahajan](#), [Dustin J. Kempton](#), [Rafal A. Angryk](#), [Shihao Ji](#)

IEEE BigData 2019

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

1-5 Feb

Expulsion of counter Evershed flows from sunspot penumbrae

[J.S. Castellanos Durán](#), [A. Korpi-Lagg](#), [S.K. Solanki](#)

ApJ 2023

<https://arxiv.org/pdf/2305.19705.pdf>

Detection of the strongest magnetic field in a sunspot light bridge

J. S. Castellanos [Durán](#), [A. Lagg](#), [S. K. Solanki](#), [M. van Noort](#)

ApJ 2020

<https://arxiv.org/pdf/2003.12078.pdf>

Super-strong Magnetic Field in Sunspots

Takenori J. [Okamoto](#), [Takashi Sakurai](#)

ApJL 2017

<https://arxiv.org/pdf/1712.08700.pdf>

Sunspots, Starspots, and Elemental Abundances

G. A. [Dochek](#) and H. P. Warren

2017 ApJ 844 52

<http://sci-hub.cc/10.3847/1538-4357/aa7bea>

2 Feb

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>

Strongest coronal magnetic fields in solar cycles 23-24: probing, statistics, and implications

V. V. [Fedenev](#), S. A. Anfinogentov, G. D. Fleishman

ApJ 2023

<https://arxiv.org/pdf/2301.08922.pdf>

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

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

2022 ApJ 927 86

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

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

[Markus J. Aschwanden](#)

ApJ 2021

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

Formation of a Solar Filament by Magnetic Reconnection and Associated Chromospheric Evaporation and Subsequent Coronal Condensation

[Bo Yang](#), [Jiayan Yang](#), [Yi Bi](#), [Junchao Hong](#), [Zhe Xu](#)

ApJ Letters 2021

<https://arxiv.org/pdf/2110.10951.pdf>

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

[Sean Quinn](#), [Mihalis Mathioudakis](#), [Christopher J. Nelson](#), [Ryan O. Milligan](#), [Aaron Reid](#), [David B. Jess](#)

ApJ 2021

<https://arxiv.org/pdf/2105.05704.pdf>

A 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>

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>

Reconstruction of a Large-scale Pre-flare Coronal Current Sheet Associated with an Homologous X-shaped Flare

Chaowei [Jiang](#), [Xiaoli Yan](#), [Xueshang Feng](#), [Aiyang Duan](#), [Qiang Hu](#), [Pingbing Zuo](#), [Yi Wang](#)
ApJ **2017**
<https://arxiv.org/pdf/1710.02775.pdf>

Observing Formation of Flux Rope by Tether-cutting Reconnection in the Sun

Zhike [Xue](#)^{1,2,3}, Xiaoli Yan^{1,2,3}, Liheng Yang^{1,3}, Jincheng Wang^{1,3,4}, and Li Zhao^{1,3}
2017 ApJL 840 L23
<http://sci-hub.cc/10.3847/2041-8213/aa7066>

Non-potential field formation in the X-shaped quadrupole magnetic field configuration

Yusuke [Kawabata](#), Satoshi Inoue, Toshifumi Shimizu
2017
<https://arxiv.org/pdf/1705.02560.pdf>

Investigating Energetic X-Shaped Flares on the Outskirts of A Solar Active Region

Rui [Liu](#), Jun Chen, Yuming Wang, Kai Liu
Scientific Reports **2016**
<http://arxiv.org/pdf/1609.02713v1.pdf>

Slipping Magnetic Reconnection Triggering a Solar Eruption of a Triangle-flag Flux Rope

Ting [Li](#) & Jun Zhang
ApJL, **2014**

http://www.researchgate.net/publication/263928819_Slipping_Magnetic_Reconnection_Triggering_a_Solar_Eruption_of_a_Triangle-flag_Flux_Rope?ev=prf_pub

2-5 Feb

The Evolution of Plasma Composition During a Solar Flare

[Andy S.H. To](#), [David M. Long](#), [Deborah Baker](#), [David H. Brooks](#), [Lidia van Driel-Gesztelyi](#), [J. Martin Laming](#), [Gherardo Valori](#)
ApJ **2021**
<https://arxiv.org/pdf/2102.09985.pdf>

3 Feb - ~07 UT: южная/центральная эрупция

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>

Identifying Solar Flare Precursors Using Time Series of SDO/HMI Images and SHARP Parameters

Yang [Chen](#)¹, Ward B. Manchester², Alfred O. Hero³, Gabor Toth², Benoit DuFumier³, Tian Zhou¹, Xiantong Wang², Haonan Zhu³, Zeyu Sun³, and Tamas I. Gombosi²
Space Weather [Volume 17, Issue 10](#) October **2019** Pages 1404-1426
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2019SW002214>

JOINT HIGH TEMPERATURE OBSERVATION OF A SMALL C6.5 SOLAR FLARE WITH IRIS/EIS/AIA

[Polito](#) V., Reeves, K.K., Del Zanna, G., Golub, L., Mason, H.E.
2015
<http://www.damtp.cam.ac.uk/user/astro/papers/polito+2015.pdf>

Magnetic reconnection between small-scale loops observed with the New Vacuum Solar Telescope

Shuhong [Yang](#), Jun Zhang, and Yongyuan Xiang

ApJL, 2014.

Animations: http://ourstar.bao.ac.cn/~shuhongyang/files/apjl_reconnection/

3-7 Feb

Deep-learning Reconstruction of Sunspot Vector Magnetic Fields for Forecasting Solar Storms

Dattaraj B. **Dhuri**^{1,2}, Shamik Bhattacharjee¹, Shraavan M. Hanasoge^{1,2}, and Sashi Kiran Mahapatra¹
2022 ApJ 939 64

<https://iopscience.iop.org/article/10.3847/1538-4357/ac9413/pdf>

4 Feb

Characterising Solar Magnetic Reconnection in Confined and Eruptive Flares

[Kanniah Balamuralikrishna](#), [John Y. H. Soo](#), [Norhaslinda Mohamed Tahrin](#), [Abdul Halim Abdul Aziz](#)

Astrophys. Space Sci. 368 (2023) 94

<https://arxiv.org/ftp/arxiv/papers/2312/2312.12873.pdf>

<https://doi.org/10.1007/s10509-023-04251-w>

Interaction of a coronal mass ejection and a stream interaction region: A case study

Paul **Geyer**¹, Mateja Dumbović¹, Manuela Temmer², Astrid Veronig², Karin Dissauer³ and Bojan Vršnak¹

A&A 672, A168 (2023)

<https://doi.org/10.1051/0004-6361/202245433>

<https://www.aanda.org/articles/aa/pdf/2023/04/aa45433-22.pdf>

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

[Sean Quinn](#), [Mihalis Mathioudakis](#), [Christopher J. Nelson](#), [Ryan O. Milligan](#), [Aaron Reid](#), [David B. Jess](#)

ApJ 2021

<https://arxiv.org/pdf/2105.05704.pdf>

Variation of Magnetic Flux Ropes Through Major Solar Flares

[Aiyong Duan](#), [Chaowei Jiang](#), [Zhenjun Zhou](#), [Xueshang Feng](#), [Jun Cui](#)

ApJL 2021

<https://arxiv.org/pdf/2012.14588.pdf>

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>

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

Dong **Wang**, Rui Liu, Yuming Wang, Kai Liu, Jun Chen, Jiajia Liu, Zhenjun Zhou, Min Zhang

ApJL 2017

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

On the Effectiveness of Multi-Instrument Solar Flare Observations During Solar Cycle 24

Ryan O. **Milligan**, Jack Ireland

Solar Phys. 2017

<https://arxiv.org/pdf/1703.04412.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>

4-6 Feb

Detection of the strongest magnetic field in a sunspot light bridge

J. S. Castellanos [Durán](#), [A. Lagg](#), [S. K. Solanki](#), [M. van Noort](#)

ApJ 2020

<https://arxiv.org/pdf/2003.12078.pdf>

Super-strong Magnetic Field in Sunspots

Takenori J. [Okamoto](#), [Takashi Sakurai](#)

ApJL 2017

<https://arxiv.org/pdf/1712.08700.pdf>

4-10 Feb

Interaction of a coronal mass ejection and a stream interaction region: A case study

Paul [Geyer](#)¹, Mateja Dumbović¹, Manuela Temmer², Astrid Veronig², Karin Dissauer³ and Bojan Vršnak¹

A&A 672, A168 (2023)

<https://doi.org/10.1051/0004-6361/202245433>

<https://www.aanda.org/articles/aa/pdf/2023/04/aa45433-22.pdf>

5 Feb

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

[Jiong Qiu](#)

ApJ 2021

<https://arxiv.org/pdf/2101.11069.pdf>

6 Feb

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>

7 Feb - A minor CME hit Earth's magnetic field and an effect of CH602.

Temporal Defocusing as a Depth Diagnostic of Submerged Sources of Transient Acoustic Emission from Solar Flares

[Savannah Perez-Piel](#), [Juan Camilo Buitrago-Casas](#), [Juan Carlos Martínez Oliveros](#) & [Charles Lindsey](#)

[Solar Physics](#) volume 298, Article number: 77 (2023)

<https://link.springer.com/content/pdf/10.1007/s11207-023-02163-0.pdf>

7-14 Feb

Imaging the Sun's Far-Side Active Regions by Applying Multiple Measurement Schemes on Multi-Skip Acoustic Waves

Junwei [Zhao](#), [Dominick Hing](#), [Ruizhu Chen](#), [Shea Hess Webber](#)

ApJ 2019)

<https://arxiv.org/pdf/1912.06736.pdf>

8 Feb

Different manifestations of a loop-like transient brightening in solar atmospheres

Qiangwei [Cai](#)^{1,2,3,4}, Hao Li⁵, Jincheng Wang⁶ and Hengqiang Feng^{1,3*}

A&A 691, A309 (2024)

<https://www.aanda.org/articles/aa/pdf/2024/11/aa49396-24.pdf>

Statistics of "Cold" Early Impulsive Solar Flares in X-ray and Microwave domains

Alexandra L. [Lysenko](#), [Alexander T. Altyntsey](#), [Natalia S. Meshalkina](#), [Dmitriy Zhdanov](#), [Gregory D. Fleishman](#)

2018

<https://arxiv.org/pdf/1802.09288.pdf>

9 Feb – 16:16: M1.0 **пересвет** $B=15,5*2/279=0,11$ $\leftarrow 16s$ $8s \rightarrow B=15,5/279=0,056$

9 Feb - The largest flare of the day was a long duration M1.1 event peaking at 16:17 UTC. Its source was a region at the southeast limb. The event was associated with a large partial halo CME.

И ещё ~12-13 UT: заметная эрупция в SE квадранте без большого CME.

Automatic detection technique for solar filament oscillations in GONG data

M. [Luna](#)^{1,2}, J. R. Mérou Mestrel^{1,2} and F. Auchère³

A&A 666, A195 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/10/aa44181-22.pdf>

<https://arxiv.org/pdf/2209.05087.pdf>

Detection of Coronal Mass Ejections Using Unsupervised Deep Clustering

[Rasha Alshehhi](#) & [Prashanth R. Marpu](#)

Solar Physics volume 296, Article number: 104 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01854-w.pdf>

<https://doi.org/10.1007/s11207-021-01854-w>

GONG Catalog of Solar Filament Oscillations Near Solar Maximum

Manuel [Luna](#), [Judith Karpen](#), [José Luís Ballester](#), [Karin Muglach](#), [Jaume Terradas](#), [Therese Kucera](#), [Holly Gilbert](#)

Astrophysical Journal Supplement Series 2018

<https://arxiv.org/pdf/1804.03743.pdf>

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

A. [Nindos](#), S. Patsourakos, A. Vourlidas, C. Tagikas

ApJ 2015

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

9-15 Feb

Light Bridge in a Developing Active Region. I. Observation of Light Bridge and its Dynamic Activity Phenomena

Shin [Toriumi](#), Yukio Katsukawa, Mark C. M. Cheung

ApJ 811 137 2015

<http://arxiv.org/pdf/1509.00183v1.pdf>

10 Feb **залимбовый пересвет** 18:16 $\leftarrow 16s$ $8s \rightarrow A=105/313=0.34$

Рядом меньше

10 Feb

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>

11 Feb – 03:31: кратковременная M1.7/1N вспышка (S12E17), S9~340, II тип.
A partial halo CME was observed after 11h UTC following a **filament eruption** near AR 11978 in the northwest quadrant, **304 A. Форбуш.**

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>

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>

Probing Twisted Magnetic Field Using Microwave Observations in an M Class Solar Flare on 11 February, 2014

I.N. **Sharykin**, [A.A. Kuznetsov](#), [I.I. Myshyakov](#)
Solar Phys. **2018**

<https://arxiv.org/pdf/1801.04400.pdf>

Feb 11-Mar 11

Observations of Slow Solar Wind from Equatorial Coronal Holes

Y.-M. **Wang** and Y.-K. Ko

2019 ApJ 880 146

sci-hub.se/10.3847/1538-4357/ab2add

12 Feb - S3098 [S12E05] developed quickly and has become capable of producing major flares, an X class flare is possible. There are several magnetic delta structures within the region. C5+ flares: M1.7/1N at 03:31, long duration C8.4/1F peaking at 13:57, M1.8 at 16:51, C5.9/1F at 22:15 UTC. The region was the source of an M3.7 flare at 04:25;
>10 UT – A slow symmetric full halo CME was observed after an M2 flare in AR S3098.
Форбуш.

Identifying preflare spectral features using explainable artificial intelligence

[Brandon Panos](#), [Lucia Kleint](#), [Jonas Zbinden](#)

A&A **2023**

<https://arxiv.org/pdf/2301.01560.pdf>

On the Variation of Volumetric Evolution of CMEs from Inner to Outer Corona

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

ApJ **2022**

<https://arxiv.org/pdf/2202.11924.pdf>

A holistic approach to understand Helium enrichment in Interplanetary coronal mass ejections: New insights

[Yogesh](#), [D. Chakrabarty](#), [N. Srivastava](#)

MNRAS **2022**

<https://arxiv.org/pdf/2202.01722.pdf>

Evolution of coronal mass ejections and the corresponding Forbush decreases: modelling vs multi-spacecraft observations

Mateja [Dumbović](#), [Bojan Vršnak](#), [Jingnan Guo](#), [Bernd Heber](#), [Karin Dissauer](#), [Fernando Carcaboso](#), [Manuela Temmer](#), [Astrid Veronig](#), [Tatiana Podladchikova](#), [Christian Möstl](#), [Tanja Amerstorfer](#), [Anamarija Kirin](#)
Solar Phys. 2020
<https://arxiv.org/pdf/2006.02253.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

Opening a Window on ICME-driven GCR Modulation in the Inner Solar System

Reka M. [Winslow](#)¹, Nathan A. Schwadron¹, Noé Lugaz¹, Jingnan Guo², Colin J. Joyce¹, Andrew P. Jordan¹, Jody K. Wilson¹, Harlan E. Spence¹, David J. Lawrence³
2018 ApJ 856 139
<http://sci-hub.tw/http://iopscience.iop.org/0004-637X/856/2/139/>

Statistical Study of Network Jets Observed in the Solar Transition Region: a Comparison Between Coronal Holes and Quiet-Sun Regions

Nancy [Narang](#), Rebecca T. Arbacher, Hui Tian, Dipankar Banerjee , Steven R. Cranmer, Ed E. DeLuca, Sean McKillop
Solar Phys. 2016
<http://arxiv.org/pdf/1604.06295v1.pdf>

Chromospheric sunspots in millimeter range as observed by Nobeyama Radioheliograph

Kazumasa [Iwai](#), Hideki Koshiishi, Kiyoto Shibasaki, Satoshi Nozawa, Shun Miyawaki, Takuro Yoneya
ApJ 2015
<http://arxiv.org/pdf/1511.08991v1.pdf>

Observation of Chromospheric Sunspot at Millimeter Range with the Nobeyama 45 m Telescope

Kazumasa [Iwai](#), Masumi Shimojo
ApJ 2015
<http://arxiv.org/ftp/arxiv/papers/1503/1503.00096.pdf>

13 Feb

Automatic detection technique for solar filament oscillations in GONG data

M. [Luna](#)^{1,2}, J. R. Mérou Mestrel^{1,2} and F. Auchère³
A&A 666, A195 (2022)
<https://www.aanda.org/articles/aa/pdf/2022/10/aa44181-22.pdf>
<https://arxiv.org/pdf/2209.05087.pdf>

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

[Markus J. Aschwanden](#)
ApJ 2021
<https://arxiv.org/pdf/2112.07759.pdf> File

Study of reconnection rates and light curves in solar flares from low and mid chromosphere

G [Sindhuja](#) [Nandita Srivastava](#) [A M Veronig](#) [W Pötzi](#)
Monthly Notices of the Royal Astronomical Society, Volume 482, Issue 3, 21 January 2019, Pages 3744–3756
sci-hub.tw/10.1093/mnras/sty2887

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>

Statistical Study of Chromospheric Evaporation in Impulsive Phase of Solar Flares

[Viacheslav M Sadykov](#), [Alexander G Kosovichev](#), [Ivan N Sharykin](#), [Graham S Kerr](#)
ApJ 2018
<https://arxiv.org/pdf/1805.10729.pdf>

GONG Catalog of Solar Filament Oscillations Near Solar Maximum

Manuel [Luna](#), [Judith Karpen](#), [José Luís Ballester](#), [Karin Muglach](#), [Jaume Terradas](#), [Therese Kucera](#), [Holly Gilbert](#)
Astrophysical Journal Supplement Series 2018
<https://arxiv.org/pdf/1804.03743.pdf>

IRIS Observations of the Mg II h & k Lines During a Solar Flare

Graham S. [Kerr](#), Paulo J.A. Simões, [Jiong Qiu](#), [Lyndsay Fletcher](#)
A&A 2015
<http://arxiv.org/pdf/1508.03813v1.pdf>

14 Feb - ~05-07 UTи позже: заметная западная эрупция; крупный CME

The magnetic origin of the mystery of rare H α Moreton waves

[Ze Zhong](#), [Yao Chen](#), [Y.W. Ni](#), [P. F. Chen](#), [Ruisheng Zheng](#), [Xiangliang Kong](#), [Chuan Li](#)
ApJ 2024
<https://arxiv.org/pdf/2412.19984>

The “SEP Clock”: A Discussion of First Proton Arrival Times in Wide-Spread Solar Energetic Particle Events.

[Posner](#), A., Richardson, I.G. & Strauss, R.DT.
Sol Phys 299, 126 (2024).
<https://doi.org/10.1007/s11207-024-02350-7>
<https://link.springer.com/content/pdf/10.1007/s11207-024-02350-7.pdf>

Space weather: the solar perspective -- an update to Schwenn (2006)

Review

[Manuela Temmer](#)
Living Reviews in Solar Physics 2021
<https://arxiv.org/pdf/2104.04261.pdf>

Toward Filament Segmentation Using Deep Neural Networks

Azim [Ahmadzadeh](#), [Sushant S. Mahajan](#), [Dustin J. Kempton](#), [Rafal A. Angryk](#), [Shihao Ji](#)
IEEE BigData 2019
<https://arxiv.org/pdf/1912.02743.pdf>

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>

Study of reconnection rates and light curves in solar flares from low and mid chromosphere

G [Sindhuja](#) [Nandita Srivastava](#) [A M Veronig](#) [W Pötzi](#)

Monthly Notices of the Royal Astronomical Society, Volume 482, Issue 3, 21 January 2019, Pages 3744–3756

sci-hub.tw/10.1093/mnras/sty2887

Statistical Properties of Photospheric Magnetic Elements Observed by SDO/HMI

Mohsen [Javaherian](#), [Hossein Safari](#), [Neda Dadashi](#), [Markus Josef Aschwanden](#)

Solar Phys. 2017

<https://arxiv.org/pdf/1707.09291.pdf>

Light Bridge in a Developing Active Region. I. Observation of Light Bridge and its Dynamic Activity Phenomena

Shin [Toriumi](#), Yukio Katsukawa, Mark C. M. Cheung

ApJ 2015

<http://arxiv.org/pdf/1509.00183v1.pdf>

14 Feb – 5 March

Monitoring, analysis and post-casting of the Earth's particle radiation environment during February 14–March 5, 2014

Vladimir [Kalegaev](#)^{1*}, Mikhail Panasyuk¹, Irina Myagkova¹, Yulia Shugay¹, Natalia Vlasova¹, Wera Barinova¹, Evgenia Beresneva¹, Sergey Bobrovnikov¹, Valery Eremeev¹, Sergey Dolenko¹, Ilya Nazarkov¹, Minh Nguyen¹ and Arnaud Prost²

J. Space Weather Space Clim. 2019, 9, A29

<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180008.pdf>

15 Feb

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

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>

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>

15-16 Feb - Three CMEs are heading for Earth. Individually they are minor clouds. However, by striking Earth's magnetic field in quick succession on Feb 14-15, they could cause significant geomagnetic activity around the poles.

The first two CMEs, which left the sun on Feb. 11th, have probably merged in transit to form a single "cannibal CME" more potent than either of its constituents. The third CME, launched on Feb. 12th, is following close on their heels.

As expected a "cannibal CME" hit Earth's magnetic field on Feb. 15th at 1300 UT.

Сильное положительное возрастание Dst~49 нТл; сильный Форбуш.

Refined Modeling of Geoeffective Fast Halo CMEs During Solar Cycle 24

E. [Yordanova](#), [M. Temmer](#), [M. Dumbović](#), [C. Scolini](#), [E. Paouris](#), [A. L. E. Werner](#), [A. P. Dimmock](#), [L. Sorriso-Valvo](#)

Space Weather [Volume22, Issue1](#) e2023SW003497 2024
<https://doi.org/10.1029/2023SW003497>
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2023SW003497>

Successive occurrences of quasi-circular ribbon flares in a fan-spine-like configuration involving hyperbolic flux tube

[Prabir K. Mitra](#) (USO/PRL), [Bhuwan Joshi](#) (USO/PRL)

MNRAS 2021

<https://arxiv.org/pdf/2101.08164.pdf>

Understanding the twist distribution inside magnetic flux ropes by anatomizing an interplanetary magnetic cloud

Yuming [Wang](#), [Chenglong Shen](#), [Rui Liu](#), [Jiajia Liu](#), [Jingnan Guo](#), [Xiaolei Li](#), [Mengjiao Xu](#), [Qiang Hu](#), [Tielong Zhang](#)

JGR 2018

<https://arxiv.org/pdf/1803.01353.pdf>

15-22 Feb

Outer Van Allen Radiation Belt Response to Interacting Interplanetary Coronal Mass Ejections

E. K. J. [Kilpua](#), [D. L. Turner](#), [A. N. Jaynes](#), [H. Hietala](#), [H. E. J. Koskinen](#), [A. Osmane](#), [M. Palmroth](#), [T. I. Pulkkinen](#), [R. Vainio](#), [D. Baker](#), [S. G. Claudepierre](#)

JGR [Volume124, Issue3](#) March 2019 Pages 1927-1947

sci-hub.se/10.1029/2018JA026238

16 Feb – 09:26: очень импульсная вспышка M1.1/SN (S11E01), сильные δm , S9~410

Multi spacecraft study with the Icarus model: Modelling the propagation of CMEs to Mercury and Earth

Tinatini [Baratashvili](#), [Benjamin Grison](#), [Brigitte Schmieder](#), [Pascal Demoulin](#), [Stefaan Poedts](#)

A&A 2024

<https://arxiv.org/pdf/2405.17988>

Data-constrained 3D modeling of a solar flare evolution: acceleration, transport, heating, and energy budget

[Gregory D. Fleishman](#), [Gelu M. Nita](#), [Galina G. Motorina](#)

ApJ 2023

<https://arxiv.org/pdf/2308.00149.pdf>

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

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

Research in Astronomy and Astrophysics 2021

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

Energy budget of plasma motions, heating, and electron acceleration in a three-loop solar flare

[Gregory D. Fleishman](#), [Lucia Kleint](#), [Galina G. Motorina](#), [Gelu M. Nita](#), [Eduard P. Kontar](#)

ApJ 913 97 2021

<https://arxiv.org/pdf/2104.00811.pdf> File

<https://doi.org/10.3847/1538-4357/abf495>

SOL2014-02-16T064620

New types of the chromospheric anemone microflares: Case study

Yu. V. [Dumin](#), [B. V. Somov](#)

A&A 2019

<https://arxiv.org/pdf/1904.09439.pdf>

Transition region bright dots in active regions observed by the Interface Region Imaging Spectrograph

Zhenyong [Hou](#), [Zhenghua Huang](#), [Lidong Xia](#), [Bo Li](#), [Maria S. Madjarska](#), [Hui Fu](#)

AIP Conference Proceedings 2018

<https://arxiv.org/pdf/1803.08294.pdf>

Observations of upward propagating waves in the transition region and corona above Sunspots

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

ApJ 2018

<https://arxiv.org/pdf/1801.07515.pdf>

Narrow-line-width UV bursts in the transition region above Sunspots observed by IRIS

Zhenyong [Hou](#), [Zhenghua Huang](#), [Lidong Xia](#), [Bo Li](#), [Maria S. Madjarska](#), [Hui Fu](#), [Chaozhou](#)

[Mou](#), [Haixia Xie](#)

ApJL 2016

<http://arxiv.org/pdf/1608.04892v1.pdf>

Stopping Frequency of Type III Solar Radio Bursts in Expanding Magnetic Flux Tubes

Hamish A. S. [Reid](#), Eduard P. Kontar

A&A 2015

<http://arxiv.org/pdf/1503.03395v1.pdf>

17 Feb - 04:50 UT, a magnetic filament erupted from the sun's western limb
~03 UT: C6.6/1F **вспышка и эрупция** in AR 11977 near center disk (S14W05) с
небольшими диммингами, но **значительной аркадой**; A small CME was observed in
STEREO imagery

Generation and annihilation of three dimensional magnetic nulls in extrapolated solar coronal magnetic field: Data-based Implicit Large Eddy Simulation

Yogesh Kumar [Maurya](#) (1 and 2), [Ramit Bhattacharyya](#) (1), [David I. Pontin](#) (3)

2024

<https://arxiv.org/pdf/2404.12034.pdf>

Interaction of a coronal mass ejection and a stream interaction region: A case study

Paul [Geyer](#)¹, Mateja Dumbović¹, Manuela Temmer², Astrid Veronig², Karin Dissauer³ and Bojan Vršnak¹

A&A 672, A168 (2023)

<https://doi.org/10.1051/0004-6361/202245433>

<https://www.aanda.org/articles/aa/pdf/2023/04/aa45433-22.pdf>

Solar Irradiance Variability Due To Solar Flares Observed in Lyman-alpha Emission

[Ryan O. Milligan](#)

Solar Phys. 2021

<https://arxiv.org/pdf/2102.00974.pdf>

Monitoring, analysis and post-casting of the Earth's particle radiation environment during February 14–March 5, 2014

Vladimir [Kalegaev](#)^{1*}, Mikhail Panasyuk¹, Irina Myagkova¹, Yulia Shugay¹, Natalia Vlasova¹, Wera Barinova¹, Evgenia Beresneva¹, Sergey Bobrovnikov¹, Valery Eremeev¹, Sergey Dolenko¹, Ilya Nazarkov¹, Minh Nguyen¹ and Arnaud Prost²

J. Space Weather Space Clim. 2019, 9, A29

<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180008.pdf>

Unambiguous Evidence of Coronal Implosions During Solar Eruptions and Flares

Juntao Wang, P. J. A. Simoes, L. Fletcher

ApJ 2018

<https://arxiv.org/pdf/1804.02354.pdf>

18 Feb – значительная эрупция SE волокна

An asymmetric full halo CME was observed after a filament eruption in the southeast quadrant.

18-20 Feb

Magnetospheric transmissivity for cosmic rays during selected recent events with interplanetary/geomagnetic disturbances

Parnahaj, I. ; Bobík, P. ; Kudela, K.

Journal of Physics: Conference Series, Volume 632, Issue 1, article id. 012064 (2015).

19 Feb – серьёзная геомагнитная буря Dst~-123 nT, возможно, от эрупции 14-ого (не исключено, что от 17-ого?)

A filament eruption in the southern hemisphere began at 15h UTC. STEREO and LASCO imagery indicate that a faint partial halo CME was launched.

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

Analysis of Geoeffective Impulsive Events on the Sun During the First Half of Solar Cycle 24

Agnieszka Gil, Monika Berendt-Marchel, Renata Modzelewska, Agnieszka Siluszyk, Marek Siluszyk, Anna Wawrzaszek & Anna Wawrzynczak

Solar Physics volume 298, Article number: 26 (2023)

<https://link.springer.com/content/pdf/10.1007/s11207-023-02119-4.pdf>

Monitoring, analysis and post-casting of the Earth's particle radiation environment during February 14–March 5, 2014

Vladimir Kalegaev^{1*}, Mikhail Panasyuk¹, Irina Myagkova¹, Yulia Shugay¹, Natalia Vlasova¹, Wera Barinova¹, Evgenia Beresneva¹, Sergey Bobrovnikov¹, Valery Eremeev¹, Sergey Dolenko¹, Ilya Nazarkov¹, Minh Nguyen¹ and Arnaud Prost²

J. Space Weather Space Clim. 2019, 9, A29

<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180008.pdf>

The Interaction of Successive Coronal Mass Ejections: A Review

Noé Lugaz, Manuela Temmer, Yuming Wang, Charles J. Farrugia

Sol Phys (2017) 292: 64. File

<http://sci-hub.cc/10.1007/s11207-017-1091-6>

CMEs during the Two Activity Peaks in Cycle 24 and their Space Weather Consequences

N. Gopalswamy, P. Mäkelä, S. Akiyama, S. Yashiro, N. Thakur

Sun and Geosphere, 2015

<http://arxiv.org/pdf/1509.04216v1.pdf> File

On the temporal evolution of spicules observed with IRIS, SDO and Hinode

H. Skogsrud, L. Rouppe van der Voort, B. De Pontieu, T. M. D. Pereira

ApJ 2015

<http://arxiv.org/pdf/1505.02525v1.pdf>

19 Feb-4 Mar

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

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

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

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

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

20 Feb -08:16: M3.0 **пересвет** $A=17*2/313=0,11$ $\leftarrow 16s$ $8s \rightarrow$ **08:01** $16*2/313=0,102$

20 Feb **залимбовый пересвет** 04:16 $\leftarrow 16s$ $8s \rightarrow$ $B=28/281=0.1$

<0.2 не берём

Рядом меньше

20 Feb – ещё одна серьёзная **геомагнитная буря Dst~-95** ; **сильный Форбуш**.

A stronger solar wind shock was observed at SOHO at 03:14 UTC on February 20, the arrival of the CME observed on February 18.

03:35 – восточная C3.3/SF вспышка (S14E38), расщеплённый II тип, faint asymmetric full halo CME;

~07:56 – западная M3/SN вспышка в AR1976 (S15W73), S5~500, многокомпонентный II тип, **протоны**, J10~13

НЕКОТОРЫЕ ОСОБЕННОСТИ СОЛНЕЧНЫХ ПРОТОННЫХ СОБЫТИЙ 7.II.2011 И 20.II.2014

ВЛАСОВА Н. А.*1, ТУЛУПОВ В. И.1, КАЛЕГАЕВ В. В.1

[КОСМИЧЕСКИЕ ИССЛЕДОВАНИЯ](#) Том: 59 Номер: 4 Год: 2021 Страницы: 296-305

DOI: [10.31857/S0023420621040063](https://doi.org/10.31857/S0023420621040063)

Monitoring, analysis and post-casting of the Earth's particle radiation environment during February 14–March 5, 2014

Vladimir **Kalegaev**^{1*}, Mikhail Panasyuk¹, Irina Myagkova¹, Yulia Shugay¹, Natalia Vlasova¹, Wera Barinova¹, Evgenia Beresneva¹, Sergey Bobrovnikov¹, Valery Eremeev¹, Sergey Dolenko¹, Ilya Nazarkov¹, Minh Nguyen¹ and Arnaud Prost²

J. Space Weather Space Clim. **2019**, 9, A29

<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180008.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>

Energy dependence of SEP electron and proton onset times

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

JGR Volume 121, Issue 7 July 2016 Pages 6168–6183

<http://arxiv.org/pdf/1609.08171v1.pdf>

Observations of Near-Simultaneous Split-Band Solar type-II Radio Bursts at Low Frequencies

Hariharan **Krishnan**_{y1}, Ramesh Rz , and Kathiravan C

CESRA 2016, p.97

http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v3.pdf

Observations of Near-Simultaneous Split-Band Solar Type-II Radio Bursts at Low Frequencies

K. **Hariharan**, R. Ramesh, C. Kathiravan
[Solar Physics](#) September **2015**, Volume 290, Issue 9, pp 2479-2489

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**

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>

21 Feb залимбовый пересвет 16:16 \leftarrow 16s 8s \rightarrow $A=41/314=0.13$
8s \rightarrow 15:56 $A=30*2/314=0.19$

<0.2 не берём

21 Feb

Propagating Disturbances in The Solar Corona and Spicular Connection

Tanmoy **Samanta**, Vaibhav Pant, Dipankar Banerjee
ApJL **2015**
<http://arxiv.org/pdf/1511.07354v1.pdf>

On the temporal evolution of spicules observed with IRIS, SDO and Hinode

H. **Skogsrud**, L. Rouppe van der Voort, B. De Pontieu, T. M. D. Pereira
ApJ **2015**
<http://arxiv.org/pdf/1505.02525v1.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>

22 Feb – небольшая буря Dst-- 66 nT на фоне

Monitoring, analysis and post-casting of the Earth's particle radiation environment during February 14–March 5, 2014

Vladimir **Kalegaev**^{1*}, Mikhail Panasyuk¹, Irina Myagkova¹, Yulia Shugay¹, Natalia Vlasova¹, Wera Barinova¹, Evgenia Beresneva¹, Sergey Bobrovnikov¹, Valery Eremeev¹, Sergey Dolenko¹, Ilya Nazarkov¹, Minh Nguyen¹ and Arnaud Prost²
J. Space Weather Space Clim. **2019**, 9, A29
<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180008.pdf>

23 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>

IRIS observations short-term variability in moss associated with transient hot coronal loops

Paola [Testa](#), [Vanessa Polito](#), [Bart De Pontieu](#)

ApJ 2019

<https://arxiv.org/pdf/1910.08201.pdf>

23-24 Feb – ещё буря Dst~- 59 nT

24 Feb -11:11: M1.2 вспышка, пересвет виден только на картинке, обработанной Гречневым.

$B=0,07$

24 Feb -12:16: M1.3 пересвет $B=9*2/281=0,06$ $\leftarrow 16s$ $8s \rightarrow 12:06$ $6*2/281=0,043$

В events неправильные координаты

24 Feb

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>

Challenges with Extreme Class-Imbalance and Temporal Coherence: A Study on Solar Flare Data

Azim [Ahmadzadeh](#), [Maxwell Hostetter](#), [Berkay Aydin](#), [Manolis K. Georgoulis](#), [Dustin J. Kempton](#), [Sushant S. Mahajan](#), [Rafal A. Angryk](#)

IEEE BigData 2019

<https://arxiv.org/pdf/1911.09061.pdf>

IRIS Observations of Spicules and Structures Near the Solar Limb

C. E. [Alissandrakis](#), [J.-C. Vial](#), [A. Koukras](#), [E. Buchlin](#), [M. Chane-Yook](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1801.02082.pdf>

The Characteristics of Solar X-Class Flares and CMEs: A Paradigm for Stellar Superflares and Eruptions?

Louise K. [Harra](#), Carolus J. Schrijver, Miho Janvier, Shin Toriumi, Hugh Hudson, Sarah Matthews, Magnus M. Woods, Hirohisa Hara, Manuel Guedel, Adam Kowalski, Rachel Osten, Kanya Kusano, Theresa Lueftinger

Solar Phys. 2016 Open Access File

25 Feb – 00:51 – X4.9 вспышка; большой пересвет на STEREO-B : $B=78*2/281=0,56$

B 00:56 появляется двойная (ИЛЛЮСТРАЦИЯ) тогда $B=33/77=0,429$

Sustained Gamma

Шарыкин Plasma-22

Thermal Properties of Current Sheet Plasmas in Solar Flares

[Tingyu Gou](#), [Katharine K. Reeves](#)

ApJ 2024

<https://arxiv.org/pdf/2407.01833>

Type III Radio Bursts from Solar Eruptions and their Connection to GLE and SGRE Events

Nat **Gopalswamy**, [Anshu Kumari](#), [Pertti A. Mäkelä](#)

Proceedings of the URSI GASS 2023, Sapporo, Japan, 19 to 26 August 2023 2023

<https://arxiv.org/ftp/arxiv/papers/2308/2308.11779.pdf> File

Why "solar tsunamis" rarely leave their imprints in the chromosphere

Ruisheng **Zheng**, [Yihan Liu](#), [Wenlong Liu](#), [Bing Wang](#), [Zhenyong Hou](#), [Shiwei Feng](#), [Xiangliang Kong](#), [Zhenghua Huang](#), [Hongqiang Song](#), [Hui Tian](#), [Pengfei Chen](#), [Robertus Erdélyi](#), [Yao Chen](#)

ApJ 2023

<https://arxiv.org/pdf/2304.14859.pdf>

Probing Particle Acceleration through Gamma-ray Solar Flare Observations **Review**

Melissa **Pesce-Rollins**, [Nicola Omodei](#), [Vahe' Petrosian](#), [Francesco Longo](#)

37th International Cosmic Ray Conference (ICRC2021) proceedings 2021

<https://arxiv.org/pdf/2109.13535.pdf> File

Categorization of Coronal Mass Ejection Driven Sheath Regions: Characteristics of STEREO Events

T. M. **Salman**, [N. Lugaz](#), [R. M. Winslow](#), [C. J. Farrugia](#), [L. K. Jian](#), [A. B. Galvin](#)

ApJ 2021

<https://arxiv.org/pdf/2106.12076.pdf>

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>

ОСОБЕННОСТИ НАЧАЛЬНОЙ СТАДИИ ФОРМИРОВАНИЯ БЫСТРОГО КОРОНАЛЬНОГО ВЫБРОСА МАССЫ 25 ФЕВРАЛЯ 2014 Г

[ЕСЕЛЕВИЧ В.Г.](#)¹, [ЕСЕЛЕВИЧ М.В.](#)¹

[СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА](#) Том: 6Номер: 3 Год: 2020 Страницы: 3-17

Monitoring, analysis and post-casting of the Earth's particle radiation environment during February 14–March 5, 2014

Vladimir **Kalegaev**^{1*}, Mikhail Panasyuk¹, Irina Myagkova¹, Yulia Shugay¹, Natalia Vlasova¹, Wera Barinova¹, Evgenia Beresneva¹, Sergey Bobrovnikov¹, Valery Eremeev¹, Sergey Dolenko¹, Ilya Nazarkov¹, Minh Nguyen¹ and Arnaud Prost²

J. Space Weather Space Clim. 2019, 9, A29

<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180008.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

DESAT: an SSW tool for SDO/AIA image de-saturation

Richard A **Schwartz**, Gabriele Torre, Anna Maria Massone, Michele Piana

Inverse Problems, 2015

<http://arxiv.org/pdf/1503.02302v1.pdf>

25 Feb – 00:49: мощная восточная (S12E82) LDE вспышка X4.9/2B, с жестким радио S15~21000, fast partial halo CME; длительные протоны **Prolonged gamma**

Simulation of solar energetic particle events originated from coronal mass ejection shocks with a data-driven physics-based transport model

Lei [Cheng](#), [Ming Zhang](#), [Ryun Young Kwon](#), [David Lario](#)

ApJ 2024

<https://arxiv.org/pdf/2411.04095>

The Center-to-Limb Variation of Non-Thermal Velocities using IRIS Si IV

[Yamini K. Rao](#), [Giulio Del Zanna](#), [Helen E. Mason](#)

MNRAS, 2022

<https://arxiv.org/pdf/2201.07290.pdf>

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

[Markus J. Aschwanden](#)

ApJ 2021

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

Validation of the SMOS mission for Space Weather operations: The potential of near real-time solar observation at 1.4 GHz

[M. Flores-Soriano](#), [C. Cid](#), [R. Crapoliechio](#)

Space Weather e2020SW002649 2021

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002649>

<https://doi.org/10.1029/2020SW002649>

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>

Search for GeV Neutrino Emission During Intense Gamma-Ray Solar Flares with the IceCube Neutrino Observatory

R. [Abbasi](#), [M. Ackermann](#), [J. Adams](#), [J. A. Aguilar](#), [M. Ahlers](#),

2021

<https://arxiv.org/pdf/2101.00610.pdf>

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

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

ApJ 2020

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

Interplanetary Radio Emission: A Summary of Recent Results

Review

Nat [Gopalswamy](#)

Journal of Computational and Interdisciplinary Science 2020

<https://arxiv.org/ftp/arxiv/papers/2008/2008.09222.pdf> File

The Statistical Relationship between White-light Emission and Photospheric Magnetic Field Changes in Flares

[J. S. Castellanos Durán](#), [L. Kleint](#)

ApJ 2020

<https://arxiv.org/pdf/2007.02954.pdf>

Understanding the Origin of Variable Compositions of Gradual Solar Energetic Particle Events by Combining Observations and Numerical Simulations

Nariaki [Nitta](#)¹, Meng Jin^{1,2}, Christina Cohen³
ECU2020 Presentation #21333

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>

ENERGETIC PARTICLES IN THE SOLAR ATMOSPHERE

Review

N. [Vilmer](#)¹ and S. Musset²

SF2A-2019: Proceedings of the Annual meeting of the French Society of Astronomy and Astrophysics.
Eds.: P. Di Matteo, O. Creevey, A. Crida, G. Kordopatis, J. Malzac, J.-B. Marquette, M. N'Diaye, O. Venot, **2019**, pp 283-289
<http://sf2a.eu/proceedings/2019/2019/vilmer.pdf>

Gamma-ray lines in solar flares with proton spectra measured by PAMELA experiment

A L [Lysenko](#)¹, E A Bogomolov¹, G I Vasiliev¹ and E P Ovchinnikova¹
[Journal of Physics: Conference Series](#), [Volume 1400](#), [Issue 2](#) (**2019**) 022042
<https://iopscience.iop.org/article/10.1088/1742-6596/1400/2/022042/pdf>

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>

First search for GeV neutrinos from bright gamma-ray solar flares using the IceCube Neutrino Observatory

Gwenhaél [de Wasseige](#) (for the IceCube Collaboration)

the 36th International Cosmic Ray Conference (ICRC 2019). PoS-ICRC2019-1075 **2019**

<https://arxiv.org/pdf/1908.08300.pdf>

Monitoring, analysis and post-casting of the Earth's particle radiation environment during February 14–March 5, 2014

Vladimir [Kalegaev](#)^{1*}, Mikhail Panasyuk¹, Irina Myagkova¹, Yulia Shugay¹, Natalia Vlasova¹, Wera Barinova¹, Evgenia Beresneva¹, Sergey Bobrovnikov¹, Valery Eremeev¹, Sergey Dolenko¹, Ilya Nazarkov¹, Minh Nguyen¹ and Arnaud Prost²

J. Space Weather Space Clim. **2019**, 9, A29

<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180008.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**

A Machine Learning Dataset Prepared From the NASA Solar Dynamics Observatory Mission

Richard [Galvez](#), [David F. Fouhey](#), [Meng Jin](#), [Alexandre Szenicer](#), [Andrés Muñoz-Jaramillo](#), [Mark C. M. Cheung](#), [Paul J. Wright](#), [Monica G. Bobra](#), [Yang Liu](#), [James Mason](#), [Rajat Thomas](#)
ApJ Supplement Series 2019
<https://arxiv.org/pdf/1903.04538.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

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>

Catalogue of >55 MeV Wide-longitude Solar Proton Events Observed by SOHO, ACE, and the STEREOs at ≈ 1 AU During 2009 – 2016

Miikka [Paassilta](#), [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>

X-Ray, Radio and SEP Observations of Relativistic Gamma-Ray Events

Review

Karl-Ludwig [Klein](#), Kostas Tziotziou, Pietro Zucca, Eino Valtonen, Nicole Vilmer, Olga E. Malandraki, Clarisse Hamadache, Bernd Heber, and Jürgen Kiener
In: O.E. Malandraki, N.B. Crosby (eds.), *Solar Particle Radiation Storms Forecasting and Analysis*
Chapter 8, 2018
<https://link.springer.com/content/pdf/10.1007%2F978-3-319-60051-2.pdf>
File Malandraki_Crosby_SEPs_Forecasting and Analysis_Book.pdf

Modelling Quasi-Periodic Pulsations in Solar and Stellar Flares

Review

J. A. [McLaughlin](#), V. M. Nakariakov, M. Dominique, P. Jelínek, S. Takasao
Space Science Reviews February 2018, 214:45
<https://link.springer.com/content/pdf/10.1007%2Fs11214-018-0478-5.pdf>

The density compression ratio of shock fronts associated with coronal mass ejections

Ryun-Young [Kwon](#), [Angelos Vourlidis](#)
Journal of Space Weather and Space Climate 2018
<https://arxiv.org/pdf/1801.04355.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

On the Link between the Release of Solar Energetic Particles Measured at Widespread Heliolongitudes and the Properties of the Associated Coronal Shocks

D. [Lario](#)¹, R.-Y. Kwon^{1,2}, P. Riley³, and N. E. Raouafi¹
2017 ApJ 847 103
<http://sci-hub.cc/http://iopscience.iop.org/0004-637X/847/2/103/>

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>

Investigating the Wave Nature of the Outer Envelope of Halo Coronal Mass Ejections

Ryun-Young **Kwon**^{1,3} and Angelos Vourlidas²

2017 ApJ 836 246

<http://sci-hub.cc/doi/10.3847/1538-4357/aa5b92>

Observations of the Formation, Development, and Structure of a Current Sheet in an Eruptive Solar Flare

Daniel B. **Seaton**, Allison E. Bartz, Jonathan M. Darnel

2017 ApJ 835 139

<https://arxiv.org/pdf/1610.06905v1.pdf>

Time Evolution of Elemental Ratios in Solar Energetic Particle events

P. **Zelina**, S. Dalla, C. M. S. Cohen, R. A. Mewaldt

ApJ 2016

<https://arxiv.org/pdf/1612.00758v1.pdf>

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

Dark Post-Flare Loops Observed by Solar Dynamics Observatory

Qiao **Song**, Jing-Song Wang, Xueshang Feng, Xiaoxin Zhang

ApJ 2016

<http://arxiv.org/pdf/1604.01510v1.pdf>

LONGITUDINAL PROPERTIES OF A WIDESPREAD SOLAR ENERGETIC PARTICLE EVENT ON 2014 FEBRUARY 25: EVOLUTION OF THE ASSOCIATED CME SHOCK

D. **Lario**¹, R.-Y. Kwon^{1,2}, A. Vourlidas¹, N. E. Raouafi¹, D. K. Haggerty¹, G. C. Ho¹, B. J. Anderson¹, A. Papaioannou³, R. Gómez-Herrero⁴, N. Dresing⁵

2016 ApJ 819 72

НАБЛЮДЕНИЯ ДИНАМИЧЕСКИХ СОБЫТИЙ НА СОЛНЦЕ В ЦЕНТРЕ И КРЫЛЬЯХ СПЕКТРАЛЬНЫХ ЛИНИЙ ВИДИМОГО, УФ И РЕНТГЕНОВСКОГО ДИАПАЗОНОВ

Дормидонтов Д.В., Пащенко М.П., Тлатов А.Г., Чернов Я.О.

Пулково «Солнечная и солнечно-земная физика – 2015», с.125

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

I.M. **Chertok** (1), A.V. Belov (1), V.V. Grechnev (2)

Solar Phys. 2015

Soft X-ray Pulsations in Solar Flares

Paulo J. A. **Simões**, Hugh S. Hudson, Lyndsay Fletcher

Solar Phys. 2015

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

The energetics of a global shock wave in the low solar corona

David M. **Long**, [Deborah Baker](#), [David R. Williams](#), [Eoin P. Carley](#), [Peter T. Gallagher](#), [Pietro Zucca](#)

ApJ **2015**
<http://arxiv.org/pdf/1412.2964v1.pdf> File

Direct Observations of Tether-cutting Reconnection During a Major Solar Event From 2014 February 24 to 25

Huadong **Chen**, Jun Zhang, Xin Cheng, Suli Ma, Shuhong Yang, Ting Li
ApJL, **2014**
<http://arxiv.org/pdf/1411.4454v1.pdf>

A Wonderful Cycle 24 Flare

Sa"m **Krucker** and Hugh Hudson
RHESSI Science Nugget, No. 2020, **2014**
http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/A_Wonderful_Cycle_24_Flare

25-28 Feb

Observations of Slow Solar Wind from Equatorial Coronal Holes

Y.-M. **Wang** and Y.-K. Ko
2019 ApJ 880 146
sci-hub.se/10.3847/1538-4357/ab2add

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>

27 Feb

Chapter 24 - Recent Geoeffective Space Weather Events and Technological System Impacts

Review

Robert J. **Redmon***[William F.Denig](#)*[Paul T.M.Loto'aniu](#)*[†DominicFuller-Rowell](#)
In: [Extreme Events in Geospace](#) Origins, Predictability, and Consequences **2018**, Pages 587-609
<http://sci-hub.tw/10.1016/B978-0-12-812700-1.00024-8>

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>

27-28 Feb – геомагнитная буря **Dst ~-102** и приличный **форбуш** от the glancing impact of a CME of 25th

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

Monitoring, analysis and post-casting of the Earth's particle radiation environment during February 14–March 5, 2014

Vladimir **Kalegaev**^{1*}, Mikhail Panasyuk¹, Irina Myagkova¹, Yulia Shugay¹, Natalia Vlasova¹, Wera Barinova¹, Evgenia Beresneva¹, Sergey Bobrovnikov¹, Valery Eremeev¹, Sergey Dolenko¹, Ilya Nazarkov¹, Minh Nguyen¹ and Arnaud Prost²
J. Space Weather Space Clim. **2019**, 9, A29
<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180008.pdf>

Magnetospheric transmissivity for cosmic rays during selected recent events with interplanetary/geomagnetic disturbances

Parnahaj, I. ; Bobík, P. ; Kudela, K.

Journal of Physics: Conference Series, Volume 632, Issue 1, article id. 012064 (2015).

28 Feb – 10:16: C8.0 **пересвет** $A=19*2/314=0.12$ $\leftarrow 16s$ $8s \rightarrow$ $19/314=0.061$

1 March, 13:36: M1.1 **пересвет** на STEREO-A $A=0,12$ По линейным изображениям

2 March, 23:21: M1.1 **пересвет** на STEREO-A $A=16*2/313=0,1$

4 March - AR 11986 behind the northwest limb was quite active during the day and produced a number of C flares including C7.6 at 11:24 and a long duration C5.5 event peaking at 18:35 UTC (**пересвет** на STEREO-A,B).

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>

Observation and Modeling of Chromospheric Evaporation in a Coronal Loop Related to Active Region Transient Brightening

G. R. Gupta, Aavek Sarkar, Durgesh Tripathi

ApJ 2018

<https://arxiv.org/pdf/1803.11172.pdf>

IRIS and SDO observation of recurrent explosive events

G. R. Gupta, Durgesh Tripathi

ApJ 2015

<http://arxiv.org/pdf/1506.05327v1.pdf>

5 March, 13:26: большой **пересвет** на STEREO-A,B и значительная корональная волна

5 March

Circular-ribbon flares and the related activities

Review

Qingmin Zhang

Reviews of Modern Plasma Physics 2024

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

Energy Partition in Four Confined Circular-Ribbon Flares

Z. M. Cai, Q. M. Zhang, Z. J. Ning, Y. N. Su, H. S. Ji

Solar Phys. 2021

<https://arxiv.org/pdf/2102.09819.pdf>

The origin of quasi-periodicities during circular ribbon flares

L. K. Kashapova, E. G. Kupriyanova, Z. Xu, H. A. S. Reid, D. Y. Kolotkov

A&A 2020

https://warwick.ac.uk/fac/sci/physics/research/cfsa/people/kolotkov/eprints/kashapova_et_al_arxiv.pdf

Transverse coronal loop oscillations excited by homologous circular-ribbon flares

Q. M. Zhang, J. Dai, Z. Xu, D. Li, L. Lu, K. V. Tam, A. A. Xu

A&A 2020

<https://arxiv.org/pdf/2005.02067.pdf>

Homologous Circular-ribbon Flares Driven by Twisted Flux Emergence

Z. **Xu**¹, K. Yang², Y. Guo², J. Zhao³, Z. J. Zhao¹, and L. Kashapova

2017 ApJ 851 30

<http://sci-hub.tw/10.3847/1538-4357/aa9995>

Undercover EUV Solar Jets Observed by the Interface Region Imaging Spectrograph

N.-H. **Chen**, D. E. Innes

ApJ 2016

<https://arxiv.org/pdf/1610.08149v1.pdf>

The formation of IRIS diagnostics VIII. IRIS observations in the C II 133.5 nm multiplet

Bhavna **Rathore**, Tiago M. D. Pereira, Mats Carlsson, Bart De Pontieu

ApJ 2015

<http://arxiv.org/pdf/1510.04845v1.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

6 March, **залимбовый пересвет** 12:16 \leftarrow 16s 8s \rightarrow $A=75/313=0.24$
8s \rightarrow 12:21 $A=52.5*2/313=0.34$

6 March, ещё один **залимбовый пересвет** 12:16 \leftarrow 16s 8s \rightarrow $B=33/283=0.12$ **<0.2 не берём**

6 March См. наш спектр со II типом

Coronal Signatures of Flare Generated Fast Mode Wave at EUV and Radio wavelengths

V. Vasanth

Solar Phys. 2024

<https://arxiv.org/pdf/2404.00135.pdf>

Reconciliation of Observational Challenges to the Impulsive-Piston Shock-Excitation Scenario.

II. Shock Waves Produced in CME-less Events with a Null-Point Topology.

Grechnev, V.V., Kiselev, V.I., Uralov, A.M., Myshyakov, I.I.:

Solar Phys., 2022, File See movies of 16 Apr 2014

Quantifying the Magnetic Structure of a Coronal Shock Producing a Type II Radio Burst

W. Su, **T.M. Li**, **X. Cheng**, **L. Feng**, **P.J. Zhang**, **P.F. Chen**, **M. D. Ding**, **L. J. Chen**, **Y. Guo**, **Y. Wang**, **D. Li**, **L. Y. Zhang**

ApJ 2022

<https://arxiv.org/pdf/2203.11042.pdf>

Observations of a Flare-Generated Blast Wave in a Pseudo Coronal Mass Ejection Event

V. G. **Eselevich**, M. V. Eselevich, I. V. Zimovets,

Solar Physics June 2019, 294:73

sci-hub.se/10.1007/s11207-019-1467-x

Partial Reflection and Trapping of a Fast-mode Wave in Solar Coronal Arcade Loops

Pankaj **Kumar**, D.E. Innes

ApJL 2015

<http://arxiv.org/pdf/1503.08165v1.pdf>

8 March

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>

9 March

Interaction between an emerging flux region and a pre-existing fan-spine dome observed by IRIS and SDO

Fayu [Jiang](#), Jun Zhang, Shuhong Yang
Publications of the Astronomical Society of Japan 2015

<http://arxiv.org/pdf/1503.04505v2.pdf>

10 March

- >19 UT: SE эрупция (волокна, проходящего через АО)

Narrow-line-width UV bursts in the transition region above Sunspots observed by IRIS

Zhenyong [Hou](#), Zhenghua Huang, Lidong Xia, [Bo Li](#), [Maria S. Madjarska](#), [Hui Fu](#), [Chaozhou Mou](#), [Haixia Xie](#)

ApJL 2016

<http://arxiv.org/pdf/1608.04892v1.pdf>

11 March – 12:16: M1.7, W90 **пересвет** $A=38*2/313=0,24$ $\leftarrow 16s$ $8s \rightarrow A=38/313=0,121$

11 March

A large-scale search for evidence of quasi-periodic pulsations in solar flares

A. R. [Inglis](#), J. Ireland, B. R. Dennis, L. A. Hayes, P. T. Gallagher

ApJ 2016

<https://arxiv.org/pdf/1610.07454v1.pdf>

11 March=Apr 7

Observations of Slow Solar Wind from Equatorial Coronal Holes

Y.-M. [Wang](#) and Y.-K. Ko

2019 ApJ 880 146

sci-hub.se/10.3847/1538-4357/ab2add

12 March – 11:06: M2.5 вспышка, **пересвет** на STEREO-A, $A=26*2/313=0,17$

22:35: M9.3 вспышка, **пересвет** на STEREO-A, $A=80*2/313=0,51$

12 March – небольшой форбуш; геомагн. буря

- 22:34: короткая M9.3/SB вспышка из западной АО (N15W78), S15~360, без метров, без протонов

Detection of Extreme and Exceptional Langmuir Wave Packets in Solar Type III Radio Bursts

[G. Thejappa](#), [R. J. MacDowall](#)

JGR Volume125, Issue6 June 2020 e2019JA027714

sci-hub.tw/10.1029/2019JA027714

12-14 March

The formation of an atypical sunspot light bridge as a result of large-scale flux emergence

[Rohan E. Louis](#), [Christian Beck](#), [Debi P. Choudhary](#)

ApJ 2020
<https://arxiv.org/pdf/2010.14085.pdf>

13 March – 19:25: M1.2 вспышка, **пересвет** на STEREO-A, $A=14*2/313=0,09$

13 March - AR 11996 behind the northwest limb produced the only noteworthy flare of the day, an M1.2 flare at 19:19 UTC. **Снова без протонов.**

A Data-constrained Analysis for Joule Heating as a Solar Active Region Atmosphere Heating Mechanism. I. Sunspot Umbral Light Bridge

M. S. Yalim¹, M. Frisse¹, C. Beck², D. P. Choudhary³, A. Prasad⁴, S. S. Nayak¹, and G. P. Zank^{1,5}
2024 ApJ 973 58

<https://iopscience.iop.org/article/10.3847/1538-4357/ad5e75/pdf>

Heating of the solar chromosphere in a sunspot light bridge by electric currents

Rohan E. Louis, Avijeet Prasad, Christian Beck, Debi Prasad Choudhary, Mehmet S. Yalim

A&A Lett 2021

<https://arxiv.org/pdf/2107.12066.pdf>

Imaging the Sun's Far-Side Active Regions by Applying Multiple Measurement Schemes on Multi-Skip Acoustic Waves

Junwei Zhao, Dominick Hing, Ruizhu Chen, Shea Hess Webber

ApJ 2019

<https://arxiv.org/pdf/1912.06736.pdf>

15 March

Explosive Chromospheric Evaporation and Warm Rain in a C3.1 Flare Observed by IRIS, Hinode/EIS, and RHESSI

Jeffrey W. Brosius and Andrew R. Inglis

2017 ApJ 848 39

Evaluating (and Improving) Estimates of the Solar Radial Magnetic Field Component from Line-of-Sight Magnetograms

K.D. Leka, G. Barnes, E. L. Wagner

Solar Phys. 2017

<https://arxiv.org/pdf/1701.04836v1.pdf>

16 March - A **large filament eruption** in the southeast quadrant was observed beginning at 02:12 UTC and have been associated with a large CME. **304 A**

Hinode/EIS measurements of active region magnetic fields

E. Landi, R. Hutton, T. Brage, W. Li

2020

<https://arxiv.org/pdf/2008.03532.pdf>

17 March

The surge-like eruption of a miniature filament associated with circular flare ribbon

Haidong Li, Jiayan Yang, Yunchun Jiang, Yi Bi, Zhining Qu, Hechao Chen

Astrophysics and Space Science February 2018, 363:26

<http://sci-hub.tw/10.1007/s10509-017-3244-3>

18 March

Radio Observations of Coronal Mass Ejection Initiation and Development in the Low Solar Corona Review

[Eoin P. Carley](#), [Nicole Vilmer](#) and [Angelos Vourlidis](#)

Front. Astron. Space Sci. 7:551558. 2020 File

<https://www.frontiersin.org/articles/10.3389/fspas.2020.551558/full>

<https://sci-hub.st/https://www.frontiersin.org/articles/10.3389/fspas.2020.551558/full>

The NWRA Classification Infrastructure: Description and Extension to the Discriminant Analysis Flare Forecasting System (DAFFS)

K.D. [Leka](#), [Graham Barnes](#), [Eric L. Wagner](#)

Journal of Space Weather and Space Climate

2018

<https://arxiv.org/pdf/1802.06864.pdf>

19 March

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>

Dynamics of subarcsecond bright dots in the transition region above sunspot and their relation to penumbral micro-jets

Tanmoy [Samanta](#), Hui Tian, Dipankar Banerjee, Nicole Schanche

ApJL 2017

<https://arxiv.org/pdf/1701.02531v1.pdf>

20 March - The region 12014 [S12E75] has displayed increasing activity and was the source of an M1.7 flare at 03:56. AR2010 and AR2014 **combined for double flares/eruptions: взаимодействие через мощную корональную волну, видимую на LASCO далеко над лимбом; CME.**

Mass of prominences experiencing failed eruptions

[B. Filippov](#)

PASAustralia 2021

<https://arxiv.org/pdf/2103.03634.pdf>

Observational Analysis on the Early Evolution of a CME Flux-rope: Pre-flare reconnection and Flux-rope's Footpoint Drift

Hechao [Chen](#), [Jiayan Yang](#), [Kaifan Ji](#), [Yadan Duan](#)

ApJ 2019

<https://arxiv.org/pdf/1911.00257.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>

21 March

Failed prominence eruptions near 24 cycle maximum

[B. Filippov](#)

MNRAS 2020

<https://arxiv.org/pdf/2003.12988.pdf>

22 March – 07:06: M1.1 вспышка, **пересвет** на STEREO-A, $A=11^*2/313=0,07$

22 March: A partial halo CME was observed after the LDE and eruption in AR 12005 (N13W59)

23 March - around 03:30, the magnetic canopy of sunspot AR2014 [S12E21] became unstable and erupted, producing a long-duration C5-class solar flare. This event was associated with an asymmetric full halo CME.

A quasi-periodic fast-propagating magnetosonic wave associated with the eruption of a magnetic flux rope

Yuandeng [Shen](#), [Yu Liu](#), [Tengfei Song](#), [Zhanjun Tian](#)

2017

<https://arxiv.org/pdf/1712.09045.pdf>

23-28 March

The Origin of Major Solar Activity - Collisional Shearing Between Nonconjugated Polarities of Multiple Bipoles Emerging Within Active Regions

Georgios [Chintzoglou](#), [Jie Zhang](#), [Mark C. M. Cheung](#), [Maria Kazachenko](#)

ApJ 871 67 2019

<https://arxiv.org/pdf/1811.02186.pdf>

sci-hub.tw/10.3847/1538-4357/aaef30

25 March

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

26 March

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>

26-31 Mar

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

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

ApJ 2022

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

28 March – **very impulsive** M2.0 at 19:18, M2.6 at 23:51 UT in AR 12017 [N10W22]. Both flares were accompanied by **coronal waves, type II radio bursts and CMEs** off the northwest limb. Microwaves S9~280 and S9~360, **без протонов**.

The “SEP Clock”: A Discussion of First Proton Arrival Times in Wide-Spread Solar Energetic Particle Events.

[Posner](#), A., [Richardson](#), I.G. & [Strauss](#), R.D.T.

Sol Phys 299, 126 (2024).

<https://doi.org/10.1007/s11207-024-02350-7>

<https://link.springer.com/content/pdf/10.1007/s11207-024-02350-7.pdf>

Failed prominence eruptions near 24 cycle maximum

B. [Filippov](#)

MNRAS 2020

<https://arxiv.org/pdf/2003.12988.pdf>

The Formation of CME from Coupling Fan-spine Magnetic System: A Difficult Journey

Haidong [Li](#), Jiayan Yang, Junchao Hong, and Hechao Chen

2019 ApJL 886 L34

sci-hub.se/10.3847/2041-8213/ab564e

The initial morphologies of the wavefronts of extreme ultraviolet waves

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

ApJL 2018

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

28-29 March

Case studies on pre-eruptive X-class flares using R-value in the lower solar atmosphere

[Shreeyesh Biswal](#), [Marianna B. Korsós](#), [Manolis K. Georgoulis](#), [Alexander Nindos](#), [Spiros](#)

[Patsourakos](#), [Robertus Erdélyi](#)

ApJ 2024

<https://arxiv.org/pdf/2408.04018>

Evolution of magnetic fields and energy release processes during homologous eruptive flares

Suraj [Sahu](#) (USO/PRL), [Bhuwan Joshi](#) (USO/PRL), [Avijeet Prasad](#) (University of Oslo), [Kyung-Suk Cho](#) (SSD/KASI)

ApJ 2022

<https://arxiv.org/pdf/2212.04150.pdf>

Homologous compact major blowout-eruption solar flares and their production of broad CMEs

[Suraj Sahu](#), [Bhuwan Joshi](#), [Alphonse C. Sterling](#), [Prabir K. Mitra](#), [Ronald L. Moore](#)

ApJ 2022

<https://arxiv.org/pdf/2203.03954>

The Origin of Major Solar Activity - Collisional Shearing Between Nonconjugated Polarities of Multiple Bipoles Emerging Within Active Regions

Georgios [Chintzoglou](#), [Jie Zhang](#), [Mark C. M. Cheung](#), [Maria Kazachenko](#)

ApJ 2018

<https://arxiv.org/pdf/1811.02186.pdf>

Quantifying the Topology and Evolution of a Magnetic Flux Rope Associated with Multi-flare Activities

Kai [Yang](#), Yang Guo, M. D. Ding

ApJ 2016

<http://arxiv.org/pdf/1604.07502v1.pdf>

28-30 March

The magnetic origin of the mystery of rare H α Moreton waves

[Ze Zhong](#), [Yao Chen](#), [Y.W. Ni](#), [P. F. Chen](#), [Ruisheng Zheng](#), [Xiangliang Kong](#), [Chuan Li](#)

ApJ 2024

<https://arxiv.org/pdf/2412.19984>

Quantifying the relationship between Moreton-Ramsey waves and "EIT waves" using observations of 4 homologous wave events

David M. [Long](#), [Jack Jenkins](#), [Gherardo Valori](#)

ApJ 2019

<https://arxiv.org/pdf/1907.07963.pdf>

29 March – утром волоконные эрупции на NW и NE, 304 A, CMEs
17:48: импульсная X1/2B вспышка, N11W32, хорошая корональная волна,
S9~1100 sfu, II тип, an asymmetric full halo CME, небольшие протоны J10~2 pfu

Why "solar tsunamis" rarely leave their imprints in the chromosphere

Ruisheng [Zheng](#), [Yihan Liu](#), [Wenlong Liu](#), [Bing Wang](#), [Zhenyong Hou](#), [Shiwei Feng](#), [Xiangliang Kong](#), [Zhenghua Huang](#), [Hongqiang Song](#), [Hui Tian](#), [Pengfei Chen](#), [Robertus Erdélyi](#), [Yao Chen](#)
ApJ 2023
<https://arxiv.org/pdf/2304.14859.pdf>

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

[Karin Dissauer](#), [KD Leka](#), [Eric L. Wagner](#)
ApJ 2022
<https://arxiv.org/pdf/2212.11251.pdf>

A window into magnetic reconnection: IRIS observations of the consequences of reconnection during solar flares

Review

Katharine [Reeves](#)
Front. Astron. Space Sci. 9: 1041951. 2022
<https://doi.org/10.3389/fspas.2022.1041951>
<https://www.frontiersin.org/articles/10.3389/fspas.2022.1041951/pdf>

A Simple Technique for Identifying the Propagation Direction of CMEs in 3D Space

Y. I. [Egorov](#) & [V. G. Fainshtein](#)
[Solar Physics](#) volume 296, Article number: 161 (2021)
<https://link.springer.com/content/pdf/10.1007/s11207-021-01904-3.pdf>
<https://doi.org/10.1007/s11207-021-01904-3>

Exploring mutual information between IRIS spectral lines. II. Calculating the most probable response in all spectral windows

[Brandon Panos](#), [Lucia Kleint](#)
2021
<https://arxiv.org/pdf/2106.03463.pdf>

Flux emergence and generation of flare-productive active regions

[Shin Toriumi](#)
Advances in Space Research 2021
<https://arxiv.org/pdf/2105.09961.pdf>

Self-consistent Nonlinear Force-free Field Reconstruction from Weighted Boundary Conditions

Alpha [Mastrano](#), [Kai E. Yang](#), [Michael S. Wheatland](#)
Solar Phys. 2020
<https://arxiv.org/pdf/2004.12510.pdf>

Electric current evolution at the footpoints of solar eruptions

Krzysztof [Barczynski](#), [Guillaume Aulanier](#), [Miho Janvier](#), [Brigitte Schmieder](#), [Sophie Masson](#)
ApJ 2020
<https://arxiv.org/pdf/2004.07990.pdf>

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>

Estimation of Key Sunquake Parameters through Hydrodynamic Modeling and Cross-Correlation Analysis

John T. [Stefan](#), [Alexander G. Kosovichev](#)

ApJ 2019

<https://arxiv.org/pdf/1911.06839.pdf>

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

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

ApJ 2019

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

Dynamic Processes of the Moreton Wave on 2014 March 29

Denis P. [Cabezas](#), Ayumi Asai, [Kiyoshi Ichimoto](#), [Takahito Sakaue](#), [Satoru UeNo](#), [Jose K. Ishitsuka](#), [Kazunari Shibata](#)

ApJ 2019

<https://arxiv.org/pdf/1908.03534.pdf>

Modeling Mg II h, k and Triplet Lines at Solar Flare Ribbons

Yingjie [Zhu](#), [Adam F. Kowalski](#), [Hui Tian](#), [Han Uitenbroek](#), [Mats Carlsson](#), [Joel C. Allred](#)

2019

<https://arxiv.org/pdf/1904.12285.pdf>

Quasi-periodic pulsations in a solar flare with an unusual phase shift

Elena G. [Kupriyanova](#), [Larisa K. Kashapova](#), [Tom Van Doorselaere](#), [Partha Chowdhury](#), [Abhishek K. Srivastava](#), [Yong-Jae Moon](#)

MNRAS 2018

<https://arxiv.org/pdf/1812.09868.pdf>

Possible Signatures of a Termination Shock in the 2014 March 29 X-class Flare Observed by IRIS

Vanessa [Polito](#)¹, Giselle Galan², Katharine K. Reeves¹, and Sophie Musset³

2018 ApJ 865 161

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

Nonlinear force-free modeling of flare-related magnetic field changes at the photosphere and chromosphere

Lucia [Kleint](#), [Michael S. Wheatland](#), [Alpha Mastrano](#), [Patrick I. McCauley](#)

ApJ 2018

<https://arxiv.org/pdf/1808.07079.pdf>

Statistical Study of Chromospheric Evaporation in Impulsive Phase of Solar Flares

[Viacheslav M Sadykov](#), [Alexander G Kosovichev](#), [Ivan N Sharykin](#), [Graham S Kerr](#)

ApJ 2018

<https://arxiv.org/pdf/1805.10729.pdf>

The Triggering of the 29-March-2014 Filament Eruption

[Magnus M. Woods](#), [Satoshi Inoue](#), [Louise K. Harra](#), [Sarah A. Matthews](#), [Kanya Kusano](#), [Nadine M. E. Kalmoni](#)

2018

<https://arxiv.org/pdf/1805.05976.pdf>

GONG Catalog of Solar Filament Oscillations Near Solar Maximum

Manuel [Luna](#), [Judith Karpen](#), [José Luís Ballester](#), [Karin Muglach](#), [Jaume Terradas](#), [Therese Kucera](#), [Holly Gilbert](#)

Astrophysical Journal Supplement Series 2018

<https://arxiv.org/pdf/1804.03743.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>

A Statistical Study of Photospheric Magnetic Field Changes During 75 Solar Flares

J. S. Castellanos [Durán](#)^{1,2}, L. Kleint^{3,4}, and B. Calvo-Mozo¹

2018 ApJ 852 25

<http://iopscience.iop.org/sci-hub.tw/0004-637X/852/1/25/>

Parameterizations of Chromospheric Condensations in dG and dMe Model Flare Atmospheres

Adam F. [Kowalski](#) (1,2,3), [Joel C. Allred](#) (4) ((1) University of Colorado, (2) National Solar Observatory, (3) Laboratory for Atmospheric and Space Physics, (4) NASA Goddard Space Flight Center)

ApJ **2017**

<https://arxiv.org/pdf/1711.09488.pdf>

Structure and Dynamics of Cool Flare Loops Observed by the Interface Region Imaging Spectrograph

K. [Mikula](#)¹, P. Heinzel², W. Liu², and A. Berlicki

2017 ApJ 845 30

<http://sci-hub.cc/10.3847/1538-4357/aa7d4e>

A parameter study for modeling MgII h and k emission during solar flares

Fatima Rubio [da Costa](#), Lucia Kleint

ApJ **2017**

<https://arxiv.org/pdf/1704.05874.pdf>

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>

Observations and Modelling of the Pre-Flare Period of the **29 March 2014 X1 Flare**

M. M. [Woods](#), L. K. Harra, S. A. Matthews, D. H. Mackay, S. Dacie, D. M. Long

Solar Phys. **2017**

<https://arxiv.org/pdf/1701.06457v1.pdf>

Non-Gaussian Velocity Distributions in Solar Flares from Extreme Ultraviolet Lines: A Possible Diagnostic of Ion Acceleration

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

ApJ **2017**

Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin [Toriumi](#), Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ **2016**

<https://arxiv.org/pdf/1611.05047v1.pdf>

The Atmospheric Response to High Nonthermal Electron Beam Fluxes in Solar Flares I: Modeling the Brightest NUV Footpoints in the X1 Solar Flare of **2014 March 29**

Adam F. **Kowalski** (University of Maryland College Park/NASA-GSFC, and University of Colorado Boulder/National Solar Observatory), Joel C. Allred (NASA Goddard Space Flight Center), Adrian N. Daw (NASA Goddard Space Flight Center), Gianna Cauzzi (INAF-Osservatorio Astrofisico di Arcetri), Mats Carlsson (University of Oslo)
ApJ **2016**
<http://arxiv.org/pdf/1609.07390v1.pdf>

Moreton and EUV Waves Associated with an X1.0 Flare and CME Ejection
Carlos **Francile**, Fernando M. López, Hebe Cremades, Cristina H. Mandrini, María Luisa Luoni, David M. Long
Solar Phys. **2016 File**

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>

First Detection of Chromospheric Magnetic Field Changes During an X1-Flare
Lucia **Kleint**
ApJ **2016**
<http://arxiv.org/pdf/1608.02552v1.pdf>

Data-driven radiative hydrodynamic modeling of SOL2014-03-29
Fatima Rubio **da Costa**
RHESSI Science Nugget No. 274, May **2016**
http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Data-driven_radiative_hydrodynamic_modeling_of_SOL2014-03-29

Data-driven Radiative Hydrodynamic Modeling of the 2014 March 29 X1.0 Solar Flare
Fatima Rubio **da Costa**, Lucia Kleint, Vahé Petrosian, Wei Liu and Joel C. Allred
ApJ **2016**
<http://arxiv.org/pdf/1603.04951v1.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>

The Vertical Current Approximation Nonlinear Force-Free Field Code - Description, Performance Tests, and Measurements of Magnetic Energies Dissipated in Solar Flares
Markus J. **Aschwanden**
2016
<http://arxiv.org/pdf/1602.00635v1.pdf>

Continuum Enhancements in the Ultraviolet, the Visible and the Infrared during the X1 flare on 2014 March 29
Lucia **Kleint**, Petr Heinzel, Phil Judge, Säm Krucker
ApJ **2015**
<http://arxiv.org/pdf/1511.04161v1.pdf>

Mg II Lines Observed during the X-class Flare on 29 March 2014 by the Interface Region Imaging Spectrograph
W. **Liu**, P. Heinzel, L. Kleint, J. Kasparova
Solar Phys. **2015**
<http://arxiv.org/pdf/1511.00480v1.pdf>

On helium line polarization during the impulsive phase of an X1 flare

Philip G. **Judge**, Lucia Kleint, Alberto Sainz-Dalda

ApJ 2015

<http://arxiv.org/pdf/1510.09218v1.pdf>

How important are electron beams in driving chromospheric evaporation in the 2014 March 29 flare?

Marina **Battaglia**, Lucia Kleint, Säm Krucker, David Graham

ApJ 2015

<http://arxiv.org/pdf/1509.09186v1.pdf>

A Circular-ribbon Solar Flare Following an Asymmetric Filament Eruption

Chang **Liu**, Na Deng, Rui Liu, Jeongwoo Lee, Etienne Pariat, Thomas Wiegelmann, Yang Liu, Lucia Kleint, Haimin Wang

ApJL 2015

<http://arxiv.org/pdf/1509.08414v1.pdf>

Spectroscopic Signatures Related to a Sunquake

Sarah A. **Matthews**, Louise K. Harra, Sergei Zharkov, Lucie M. Green

ApJ 2015

<http://arxiv.org/pdf/1508.07216v1.pdf>

Chromospheric Evaporation in an X1.0 Flare on 2014 March 29 Observed with IRIS and EIS

Y. **Li**, M. D. Ding, **J. Qiu**, **J. X. Cheng**

ApJ 2015

<http://arxiv.org/pdf/1508.03927v1.pdf>

Magnetic Energy Dissipation during the 2014 March 29 Solar Flare

M.J. **Aschwanden**

ApJL 2015

http://www.lmsal.com/~aschwand/eprints/2015_iris.pdf

The fast filament eruption leading to the X-flare on March 29, 2014

Lucia **Kleint**, Marina Battaglia, Kevin Reardon, Alberto Sainz Dalda, Peter R. Young, Säm Krucker

ApJ 2015

<http://arxiv.org/pdf/1504.00515v1.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

The 2014 March 29 X-flare: sub-arcsecond resolution observations of Fe XXI 1354.1

Peter **Young**, Hui Tian, Sarah Jaeggli

ApJ, 2014

<http://arxiv.org/pdf/1409.8603v1.pdf>

On the Origin of a Sunquake during the 29 March 2014 X1 Flare

Philip G. **Judge**, Lucia Kleint, Alina Donea, Alberto Sainz Dalda, Lyndsay Fletcher

2014

<http://arxiv.org/pdf/1409.6268v1.pdf>

Hydrogen Balmer Continuum in Solar Flares Detected by the Interface Region Imaging Spectrograph (IRIS)

Petr [Heinzl](#), Lucia Kleint

ApJL, 2014

<http://arxiv.org/pdf/1409.5680v1.pdf>

Flare Observed by a Dozen Instruments

Lucia [Kleint](#) and Kevin Reardon

RHESSI Science Nugget, No. 231, 2014

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

A wonderful flare observed by a grand set of instruments, including IRIS and IBIS.

NASA press release described the event as the “best-observed flare of all time”.

A www.nasa.gov/content/goddard/nasa-telescopes-coordinate-best-ever-flare-observations/>

We would like to coordinate science studies of this flare to help analyze the huge amount of data and gather expertise from the community. If you'd like to take part, please send an e-mail to pyoung9@gmu.edu. Peter Young (GMU, USA)

30 March

Quantifying the relationship between Moreton-Ramsey waves and "EIT waves" using observations of 4 homologous wave events

David M. [Long](#), [Jack Jenkins](#), [Gherardo Valori](#)

ApJ 2019

<https://arxiv.org/pdf/1907.07963.pdf>

31 March – 08:16: M1.4 **пересвет** $A=32 \cdot 2/314=0,20 \leftarrow 16s \ 8s \rightarrow$ **08:06** $21 \cdot 2/314=0,134$

31 March – Длительное возмущение, бегущее вдоль крупного SE волокна

Simultaneous Near-Sun Observations of a Moving Type IV Radio Burst and the Associated White-Light Coronal Mass Ejection

K. [Hariharan](#), R. Ramesh, C. Kathiravan, T. J. Wang

Solar Phys. Volume 291, Issue 5, pp 1405-1416 2016 DOI: 10.1007/s11207-016-0918-x

See CESRA science highlight #1169, Jan 2017 <http://www.astro.gla.ac.uk/users/eduard/cesra/?p=1169>

Real-time Flare Detection in Ground-based H α Imaging at Kanzelhöhe Observatory

[Poetzi](#), Werner, Veronig, A.M., Riegler, G., Amerstorfer, U., Pock, Th., Temmer, M., Polanec, W., Baumgartner, D.J.

Solar Phys., 2014

<http://arxiv.org/pdf/1411.3896v2.pdf>

April 2014

A comprehensive three-dimensional radiative magnetohydrodynamic simulation of a solar flare

[Cheung, M. C. M.](#); [Rempel, M.](#); [Chintzoglou, G.](#); [Chen, F.](#); [Testa, P.](#); [Martínez-Sykora, J.](#); [Sainz Dalda, A.](#); [DeRosa, M. L.](#); [Malanushenko, A.](#); [Hansteen, V.](#); [De Pontieu, B.](#); [Carlsson, M.](#); [Gudiksen, B.](#); [McIntosh, S. W.](#)

Nature Astronomy, Volume 3, p. 160-166, 2019

[https://www.nature.com/articles/s41550-018-0629-](https://www.nature.com/articles/s41550-018-0629-3.epdf?author_access_token=gr3ZY26ebIzUR2WcqRelLtRgN0jAjWel9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot)

[3.epdf?author_access_token=gr3ZY26ebIzUR2WcqRelLtRgN0jAjWel9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot](https://www.nature.com/articles/s41550-018-0629-3.epdf?author_access_token=gr3ZY26ebIzUR2WcqRelLtRgN0jAjWel9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot)
[ukX4DnLjV72vef04rbrBNiKT8IpB-xuD7Br3cS_76LBoSAte-Jvzb_BTU2AfQS-zu-](https://www.nature.com/articles/s41550-018-0629-3.epdf?author_access_token=gr3ZY26ebIzUR2WcqRelLtRgN0jAjWel9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot)
[EmkHfeGYupBmflp6w%3D%3D](https://www.nature.com/articles/s41550-018-0629-3.epdf?author_access_token=gr3ZY26ebIzUR2WcqRelLtRgN0jAjWel9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot)

1 Apr

Automated detection of coronal Mass ejection origins for space weather Applications (ALMANAC)

[Thomas Williams](#), [Huw Morgan](#)

Space Weather 2022

<https://arxiv.org/pdf/2211.04405.pdf>

Predicting the Geoeffectiveness of CMEs Using Machine Learning

[Andreea-Clara Pricopi](#), [Alin Razvan Paraschiv](#), [Diana Besliu-Ionescu](#), [Anca-Nicoleta Marginean](#)

ApJ 2022

<https://arxiv.org/pdf/2206.11472.pdf>

1-2 April

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

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

ApJ 2020

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

New Evidence that Magnetoconvection Drives Solar–Stellar Coronal Heating

Sanjiv K. [Tiwari](#)^{1,2,3,4}, Julia K. Thalmann⁵, Navdeep K. Panesar¹, Ronald L. Moore^{1,2}, and Amy R. Winebarger

2017 ApJL 843 L20

<http://iopscience.iop.org/sci-hub.cc/2041-8205/843/2/L20/>

2 April - 14:05: LDE M6.5 вспышка, N14E53, II/IV тип, крупный гало CME, радио в дм диапазоне, S610~4100, S3~3700, S9~400. Активность рядом в северном волокне. Activity in nearby AR 12030 may have triggered the flare which was also associated with a large filament eruption to the north of the region.

A holistic approach to understand Helium enrichment in Interplanetary coronal mass ejections:

New insights

[Yogesh](#), [D. Chakrabarty](#), [N. Srivastava](#)

MNRAS 2022

<https://arxiv.org/pdf/2202.01722.pdf>

Investigation on the Spatiotemporal Structures of Supra-Arcade Spikes

[Rui Liu](#), [Yuming Wang](#)

A&A 2021

<https://arxiv.org/pdf/2106.04752.pdf>

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>

Which Bow Shock Theory, Gasdynamic or Magnetohydrodynamic, Better Explains CME Stand-off Distance Ratios from LASCO-C2 Observations ?

Jae-Ok [Lee](#)^{1,2}, Y.-J. Moon¹, Jin-Yi Lee³, R.-S. Kim², and K.-S. Cho²

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The relationships among solar flare impulsiveness, energy release, and ribbon development

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Precursory Signals of Forbush Decreases Not Connected with Shock Waves

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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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[КУЗЬМЕНКО И.В.](#)¹

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18-19 April – заметный форбуш; видимо, от КД

A window into magnetic reconnection: IRIS observations of the consequences of reconnection during solar flares

Review

Katharine **Reeves**

Front. Astron. Space Sci. 9: 1041951. 2022

<https://doi.org/10.3389/fspas.2022.1041951>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.1041951/pdf>

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

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

2017 ApJ 838 59 File

<http://sci-hub.cc/10.3847/1538-4357/aa5cb8>

Interaction of Two Filament Channels of Different Chiralities

Navin Chandra **Joshi**, Boris Filippov, Brigitte Schmieder, [Tetsuya Magara](#), [Young-Jae Moon](#), [Wahab Uddin](#)

ApJ 2016

<http://arxiv.org/pdf/1605.01812v1.pdf>

Ensemble modeling of CMEs using the WSA-ENLIL+Cone model

M. L. **Mays**, A. Taktakishvili, A. A. Pulkkinen, D. Odstrcil, P. J. MacNeice, L. Rastaetter, J. A. LaSota, Y. Zheng, M. M. Kuznetsova

2015 Solar Phys.

<http://arxiv.org/pdf/1504.04402v1.pdf>

The UCSD kinematic IPS solar wind boundary and its use in the ENLIL 3-D MHD prediction model

B. V. **Jackson**^{1,*}, D. Odstrcil^{2,3}, H.-S. Yu¹, P. P. Hick¹, A. Buffington¹, J. C. Mejia-Ambriz^{1,4}, J. Kim⁵, S. Hong⁵, Y. Kim⁵, J. Han⁵ and M. Tokumaru

Space Weather [Volume 13, Issue 2](#), pages 104–115, February 2015

19 April – ещё небольшой форбуш от эрупций 18-ого

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

Imaging and spectroscopic observations of magnetic reconnection and chromospheric evaporation in a solar flare

Hui **Tian**, Gang Li, Katharine K. Reeves, John C. Raymond, Fan Guo, Wei Liu, Bin Chen, Nicholas A. Murphy

ApJL 2014

<http://arxiv.org/pdf/1411.2301v1.pdf>

20 Apr

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

CMEChaser, Detecting Line-of-Sight Occultations Due to Coronal Mass Ejections

Golam [Shaifullah](#), [Caterina Tiburzi](#) & [Pietro Zucca](#)

Solar Physics volume 295, Article number: 136 (2020)

<https://arxiv.org/pdf/2008.12153.pdf>

<https://link.springer.com/content/pdf/10.1007/s11207-020-01705-0.pdf>

21 Apr

GONG Catalog of Solar Filament Oscillations Near Solar Maximum

Manuel [Luna](#), [Judith Karpen](#), [José Luís Ballester](#), [Karin Muglach](#), [Jaume Terradas](#), [Therese Kucera](#), [Holly Gilbert](#)

Astrophysical Journal Supplement Series 2018

<https://arxiv.org/pdf/1804.03743.pdf>

22 Apr

H α and H β emission in a C3.3 solar flare: comparison between observations and simulations

Vincenzo [Capparelli](#), [Francesca Zuccarello](#), [Paolo Romano](#), [Paulo J. A. Simoes](#), [Lyndsay Fletcher](#), [David Kuridze](#), [Mihalis Mathioudakis](#), [Peter H. Keys](#), [Gianna Cauzzi](#), [Mats Carlsson](#)

2017

<https://arxiv.org/pdf/1710.04067.pdf>

24 Apr

Temporal and Spatial Scales in Coronal Rain Revealed by UV Imaging and Spectroscopic Observations

Ryohtaroh T. [Ishikawa](#), [Yukio Katsukawa](#), [Patrick Antolin](#), [Shin Toriumi](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2003.13214.pdf>

25 April – 00:26: X1.3вспышка, **пересвет** на STEREO-A, $A=92*2/313=0,59$
 $B=29/77$

25 April – 00:27: западная прилиббовая (S15W90; AR 2046) вспышка X1.3, S3-5~1000, II тип; крупный CME; **без протонов**

On the Effect of Coronal Rain on Decayless Kink Oscillations of Coronal Loops

Arpit Kumar [Shrivastav](#), [Vaibhav Pant](#), [Patrick Antolin](#)

A&A 2024

<https://arxiv.org/pdf/2405.07177>

Solar Fast Drifting Radio Bursts in an X1.3 Flare on 2014 April 25

Baolin [Tan](#), [Nai-hwa Chen](#), [Ya-hui Yang](#), [Chengming Tan](#), [Satoshi Masuda](#), [Xingyao Chen](#), [H. Misawa](#)

ApJ 2019

<https://arxiv.org/pdf/1909.13209.pdf>

Extreme-ultraviolet Late Phase Caused by Magnetic Reconnection over Quadrupolar Magnetic Configuration in a Solar Flare

Zhenjun [Zhou](#), [Xin Cheng](#), [Lijuan Liu](#), [Yu Dai](#), [Yuming Wang](#), [Jun Cui](#)

2019

<https://arxiv.org/pdf/1905.00549.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>

Double Coronal X-ray and Microwave Sources Associated With A Magnetic Breakout Solar Eruption

Yao **Chen**, Zhao Wu, Wei Liu, Richard A. Schwartz, Di Zhao, Bing Wang, Guohui Du
2017

<https://arxiv.org/pdf/1705.06074.pdf>

Hard X-ray morphology of the X1.3 April 25, 2014 partially occulted limb solar flare

Frederic **Effenberger**, Fatima Rubio da Costa, Vahe Petrosian
proceedings for the 15th Annual International Astrophysics Conference 2016

<http://arxiv.org/pdf/1605.04858v1.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>

28 Apr

Observations of solar small-scale magnetic flux-sheet emergence

C.E. **Fischer**, J.M. Borrero, N. Bello González, A.J. Kaithakkal

A&A 2019

<https://arxiv.org/pdf/1901.05870.pdf>

Chromospheric impact of an exploding solar granule

Catherine E. **Fischer**, Nazaret Bello González, Reza Rezaei

A&A 2017

<https://arxiv.org/pdf/1706.00770.pdf>

29 Apr

On the Variation of Volumetric Evolution of CMEs from Inner to Outer Corona

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

ApJ 2022

<https://arxiv.org/pdf/2202.11924.pdf>

³He-rich solar energetic particles: Solar sources

Review

R. **Bucik**

Space Sci Rev 2020

<https://arxiv.org/pdf/2002.09442.pdf>

Trick or TWIKH Spicules

Patrick **Antolin**, Ineke De Moortel, Don Schmit, Bart De Pontieu, Tiago M. D. Pereira

UKSP Nugget #95 2018

<http://www.uksolphys.org/uksp-nugget/95-trick-or-twikh-spicules/>

Transverse Wave Induced Kelvin-Helmholtz Rolls in Spicules

Patrick **Antolin**, [Don Schmit](#), [Tiago M. D. Pereira](#), [Bart De Pontieu](#), [Ineke De Moortel](#)

ApJ 2018

<https://arxiv.org/pdf/1803.00821.pdf>

29-30 April – An unexpected disturbance embedded within the low speed solar wind caused a **geomagnetic storm** late in the day and early on April 30.

-- A **filament eruption** began late (~22:30) in the day to the east of AR 12047 (near the disk center). LASCO imagery indicate that at least a partial halo CME was associated with this event

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

3He-Rich Solar Energetic Particles in Helical Jets on the Sun

Radoslav [Bucik](#), [Davina E. Innes](#), [Glenn M. Mason](#), [Mark E. Wiedenbeck](#), [Raul Gomez-Herrero](#), [Nariaki V. Nitta](#)

ApJ 2017

<https://arxiv.org/pdf/1711.09394.pdf>

30 Apr

Characteristics of ephemeral coronal holes

Andrew R. [Inglis](#), [Rachel E. O'Connor](#), [W. Dean Pesnell](#), [Michael S. Kirk](#), [Nishu Karna](#)

ApJ 2019

<https://arxiv.org/pdf/1906.01757.pdf>

April 2014

A comprehensive three-dimensional radiative magnetohydrodynamic simulation of a solar flare

[Cheung, M. C. M.](#); [Rempel, M.](#); [Chintzoglou, G.](#); [Chen, F.](#); [Testa, P.](#); [Martínez-Sykora, J.](#); [Sainz Dalda, A.](#); [DeRosa, M. L.](#); [Malanushenko, A.](#); [Hansteen, V.](#); [De Pontieu, B.](#); [Carlsson, M.](#); [Gudiksen, B.](#); [McIntosh, S. W.](#)

Nature Astronomy, Volume 3, p. 160-166, 2019

[https://www.nature.com/articles/s41550-018-0629-](https://www.nature.com/articles/s41550-018-0629-3.epdf?author_access_token=gr3ZY26eblzUR2WcqRelLtRgN0jAjWeI9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot)

[3.epdf?author_access_token=gr3ZY26eblzUR2WcqRelLtRgN0jAjWeI9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot](https://www.nature.com/articles/s41550-018-0629-3.epdf?author_access_token=gr3ZY26eblzUR2WcqRelLtRgN0jAjWeI9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot)
[ukX4DnLjV72vef04rbrBNiKT8IpB-xuD7Br3cS_76LBoSAtE-Jvzb_BTU2AfQS-zu-](https://www.nature.com/articles/s41550-018-0629-3.epdf?author_access_token=gr3ZY26eblzUR2WcqRelLtRgN0jAjWeI9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot)
[EmkHfeGYupBmflp6w%3D%3D](https://www.nature.com/articles/s41550-018-0629-3.epdf?author_access_token=gr3ZY26eblzUR2WcqRelLtRgN0jAjWeI9jnR3ZoTv0MI0vLceeS715erqhTpFvw2Hot)

1 May

Revisiting the formation mechanism for coronal rain from previous studies

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

Research in Astronomy and Astrophysics 2021

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

Probing the Physics of the Solar Atmosphere with the Multi-slit Solar Explorer (MUSE): II. Flares and Eruptions

[Mark C. M. Cheung](#), [Juan Martínez-Sykora](#), [Paola Testa](#), [Bart De Pontieu](#),

ApJ 2021

<https://arxiv.org/pdf/2106.15591.pdf>

Observations and Simulations of Reconnecting Current Sheets in the Solar Corona

Spiro [Antiochos](#), Pankaj Kumar, Judy Jarpen, and Joel Dahlin

EGU2020-5597 May 2020

<https://meetingorganizer.copernicus.org/EGU2020/displays/36057>

Presentaton #5597 <https://presentations.copernicus.org/EGU2020/presentations-ST1.7.zip>

First Detection of Plasmoids from Breakout Reconnection on the Sun

Pankaj [Kumar](#), [Judith T. Karpen](#), [Spiro K. Antiochos](#), [Peter F. Wyper](#), [C. Richard DeVore](#)

APJL 2019

<https://arxiv.org/pdf/1909.06637.pdf>

Direct Observations of Magnetic Reconnection Outflow and CME Triggering in a Small Erupting Solar Prominence

Katharine K. [Reeves](#), Patrick I. McCauley and Hui Tian
ApJL 2015

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>

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

2 May

First simultaneous observations of a near-relativistic electron spike event by both STEREO spacecraft

A. [Klassen](#), N. Dresing, R. Gómez-Herrero, B. Heber
A&A 2015
http://www.ieap.uni-kiel.de/et/people/klassen/Klassen_25700.pdf

Which detectors can I use to analyze this flare?

Brian [Dennis](#) and Kim Tolbert
RHESSI Science Nuggets, #235, 2014
http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Which_detectors_can_I_use_to_analyze_this_flare%3F

2-5 May

Long-Term Evolution of Three Light Bridges Developed on the Same Sunspot

[Ana Belén Griñón-Marín](#), [Adur Pastor Yabar](#), [Rebecca Centeno](#), [Héctor Socas-Navarro](#)
2021
<https://arxiv.org/pdf/2102.04392.pdf>

3 May

Spectropolarimetric Radio Imaging of Faint Gyrosynchrotron Emission from a CME : A Possible Indication of the Insufficiency of Homogeneous Models

[Devojyoti Kansabanik](#), [Surajit Mondal](#), [Divya Oberoi](#)
ApJ 2024
<https://arxiv.org/pdf/2404.14714.pdf>

Observations of Instability-driven Nanojets in Coronal Loops

A. Ramada C. [Sukarmadji](#)1, Patrick Antolin1, and James A. McLaughlin1
2022 ApJ 934 190
<https://iopscience.iop.org/article/10.3847/1538-4357/ac7870/pdf>

Iris si iv line profiles: An indication for the plasmoid instability during small-scale magnetic reconnection on the sun

Davina [Innes](#), LiJia Guo, YiMin Huang, Amitava Bhattacharjee
ApJ 2015
<http://arxiv.org/pdf/1509.08837v1.pdf>

4 May

Space Weather Research using Spectropolarimetric Radio Imaging Combined With Aditya-L1 and PUNCH Missions

[Devojyoti Kansabanik](#), [Surajit Mondal](#), [Divya Oberoi](#), [Puja Majee](#)

Conference proceedings, The 21st Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, Edited by A. S. Brun, J. Bouvier, P. Petit 2023

<https://arxiv.org/pdf/2301.13673.pdf>

Deciphering Faint Gyrosynchrotron Emission from Coronal Mass Ejection using Spectropolarimetric Radio Imaging

[Devojyoti Kansabanik](#), [Surajit Mondal](#), [Divya Oberoi](#)

ApJ 2023

<https://arxiv.org/pdf/2301.06522.pdf>

Tackling the Unique Challenges of Low-Frequency Solar-Polarimetry with SKA-Low Precursor : The Algorithm

[Devojyoti Kansabanik](#), [Divya Oberoi](#), [Surajit Mondal](#)

ApJ 2022

<https://arxiv.org/pdf/2204.04578.pdf>

Segmentation of Coronal Holes Using Active Contours Without Edges

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

Solar Phys. 2016

4-5 May

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>

May 4-31

Observations of Slow Solar Wind from Equatorial Coronal Holes

Y.-M. [Wang](#) and Y.-K. Ko

2019 ApJ 880 146

[sci-hub.se/10.3847/1538-4357/ab2add](https://arxiv.org/abs/1905.08477)

5 May

Working Principle of the Calibration Algorithm for High Dynamic Range Solar Imaging with Square Kilometre Array Precursor

[Devojyoti Kansabanik](#)

Solar Phys. 2022

<https://arxiv.org/pdf/2207.11665.pdf>

6 May

Effect of the Heliospheric State on CME Evolution

[Fithanegest Kassa Dagnev](#), [Nat Gopalswamy](#), [Solomon Belay Tessema](#), [Sachiko Akiyama](#), [Seiji Yashiro](#)

ApJ 2022

<https://arxiv.org/ftp/arxiv/papers/2208/2208.03536.pdf>

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

[Markus J. Aschwanden](#)

ApJ 2021

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

Observation of a Metric Type N Solar Radio Burst

Xiangliang [Kong](#), Yao Chen, Shiwei Feng, [Guohui Du](#), [Chuanyang Li](#), [Artem Koval](#), [V. Vasanth](#), [Bing Wang](#), [Fan Guo](#), [Gang Li](#)

ApJ 2016

<http://arxiv.org/pdf/1608.00093v1.pdf>

7 May

Origin of 3He abundance enhancements in gradual solar energetic particle events

Radoslav [Bucik](#), [Samuel T. Hart](#), [Maher A. Dayeh](#), [Mihir I. Desai](#), [Glenn M. Mason](#), [Mark E. Wiedenbeck](#)

IAU Symposium 388 Proceedings 2024

<https://arxiv.org/pdf/2410.15515>

Magnetic field in atypical prominence structures: Bubble, tornado and eruption

P. J. [Levens](#), B. Schmieder, A. López Ariste, N. Labrosse, K. Dalmasse, B. Gelly

2016

<http://arxiv.org/pdf/1605.05964v1.pdf>

8 May – 10:07: восточная (N08E54) вспышка M5.2/2B, S15~1500

- An interplanetary shock wave, origin unknown, hit Earth's magnetic field during the late hours of May 7th. **Буря Dst~-48 nT.**

9 May

Direct Imaging of MHD Wave Mode Conversion Near a 3D Null Point on the Sun

[Pankaj Kumar](#), [Valery M. Nakariakov](#), [Judith T. Karpen](#), [Kyung-Suk Cho](#)

ApJ 2024

<https://arxiv.org/pdf/2403.02250.pdf>

First High-resolution Spectroscopic Observations of an Erupting Prominence Within a Coronal Mass Ejection by the Interface Region Imaging Spectrograph (IRIS)

Wei [Liu](#), Bart De Pontieu, Jean-Claude Vial, Alan M. Title, Mats Carlsson, Han Uitenbroek, Takenori J. Okamoto, Thomas E. Berger, Patrick Antolin

ApJ 2015

<http://arxiv.org/pdf/1502.04738v1.pdf>

10 May

Slowly positively drifting bursts generated by large-scale magnetic reconnection

[Alena Zemanová](#), [Marian Karlický](#), [Jana Kašparová](#), [Jaroslav Dudík](#), [Ján Rybák](#)

A&A 2024

<https://arxiv.org/pdf/2408.12218>

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>

Study of reconnection rates and light curves in solar flares from low and mid chromosphere

G [Sindhuja](#), [Nandita Srivastava](#), [A M Veronig](#), [W Pötzi](#)
Monthly Notices of the Royal Astronomical Society, Volume 482, Issue 3, 21 January 2019, Pages 3744–3756
sci-hub.tw/10.1093/mnras/sty2887

Reconnection fluxes in eruptive and confined flares and implications for superflares on the Sun

Johannes [Tschernitz](#), [Astrid M. Veronig](#), [Julia K. Thalmann](#), [Jürgen Hinterreiter](#), [Werner Pötzi](#)
ApJ 2017
<https://arxiv.org/pdf/1712.04701.pdf>

Real-time Flare Detection in Ground-based H α Imaging at Kanzelhöhe Observatory

[Poetzi](#), [Werner](#), [Veronig, A.M.](#), [Riegler, G.](#), [Amerstorfer, U.](#), [Pock, Th.](#), [Temmer, M.](#), [Polanec, W.](#), [Baumgartner, D.J.](#)
Solar Phys., 2014
<http://arxiv.org/pdf/1411.3896v2.pdf>

10-12 May

Quasi-Periodic Oscillation of a Coronal Bright Point

Tanmoy [Samanta](#), [Dipankar Banerjee](#), [Hui Tian](#)
ApJ 2015
<http://arxiv.org/pdf/1505.00587v1.pdf>

11 May - A pair of bright coronal mass ejections (CMEs) billowed away from the eastern limb. Both CMEs were propelled from the sun by unstable filaments of magnetism, which erupted in quick succession during the early hours. See STEREO-B and
<http://www.spaceweather.com/archive.php?view=1&day=12&month=05&year=2014>.

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>

14 May – ~07 UT: SE эрупция, **304 A**
15:04: западная (N07W30) C8.3 LDE, без радио, без протонов (как и 13-ого)

15 May

Generalisation of the Magnetic Field Configuration of typical and atypical Confined Flares

Navin Chandra [Joshi](#), [Xiaoshuai Zhu](#), [Brigitte Schmieder](#), [Guillaume Aulanier](#), [Miho Janvier](#), [Bhuwan Joshi](#), [Tetsuya Magara](#), [Ramesh Chandra](#), [Satoshi Inoue](#)
ApJ 2018
<https://arxiv.org/pdf/1811.01228.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>

16 May

Characteristics of Chromospheric Oscillation Periods in Magnetic Bright Points (MBPs)

Rayhane **Sadeghi**, [Ehsan Tavabi](#)

MNRAS **2022**

<https://arxiv.org/ftp/arxiv/papers/2203/2203.00665.pdf>

Impulsive Solar Energetic Particle Events: EUV Waves and Jets MINI **REVIEW**

R. **Bucik**

Front. Astron. Space Sci. 9? 807961 **2021**

<https://doi.org/10.3389/fspas.2021.807961>

<https://arxiv.org/abs/2112.14282>

³He-rich solar energetic particles: Solar sources

Review

R. **Bucik**

Space Sci Rev **2020**

<https://arxiv.org/pdf/2002.09442.pdf>

Twin CME Launched by a Blowout Jet Originated from the Eruption of a Quiet-Sun Mini-filament

Ritika **Solanki**, [Abhishek K. Srivastava](#), [Yamini K. Rao](#), [Bhola N. Dwivedi](#)

Solar Phys. **2019**

<https://arxiv.org/pdf/1905.02475.pdf>

Chromospheric heating due to cancellation of quiet Sun internetwork fields

Milan **Gošić**, [Jaime de la Cruz Rodríguez](#), [Bart De Pontieu](#), [Luis R. Bellot Rubio](#), [Mats Carlsson](#), [Sara Esteban Pozuelo](#), [Ada Ortiz](#), [Vanessa Polito](#)

ApJ **2018**

<https://arxiv.org/pdf/1802.07392.pdf>

EVIDENCE FOR A COMMON ACCELERATION MECHANISM FOR ENRICHMENTS OF ³He AND HEAVY IONS IN IMPULSIVE SEP EVENTS

Glenn M. **Mason**¹, Nariaki V. Nitta², Mark E. Wiedenbeck³, and Davina E. Innes

2016 ApJ 823 138

Observations of solar X-ray and EUV jets and their related phenomena **Review**

Davina **Innes**, Radoslav Bucik, Li-Jia Guo, Nariaka Nitte

Astronomische Nachrichten **2016**

<http://arxiv.org/pdf/1603.03258v1.pdf>

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

Nariaki V. **Nitta**, Glenn M. Mason, Linghua Wang, Christina M. S. Cohen, Mark E. Wiedenbeck

ApJ **2015**

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

19 May – >05: серьёзная эрупция центрально-северного волокна в северном направлении,

304 A

22-23 May – небольшая буря и заметный форбуш; видимо, glancing impact от эрупции 19-ого

23-24 May

Magnetic field in atypical prominence structures: Bubble, tornado and eruption

P. J. [Levens](#), B. Schmieder, A. López Ariste, N. Labrosse, K. Dalmasse, B. Gelly

2016

<http://arxiv.org/pdf/1605.05964v1.pdf>

24 May

Fine Magnetic Structure and Origin of Counter-Streaming Mass Flows in a Quiescent Solar Prominence

Yuandeng [Shen](#), Yu Liu, Ying D. Liu, P. F. Chen, Jiangtao Su, Zhi Xu, Zhong Liu

Astronomical Journal Letters 2015

<http://arxiv.org/pdf/1511.02489v1.pdf>

25 May

Onset of turbulent fast magnetic reconnection observed in the solar atmosphere

L. P. [Chitta](#), [A. Lazarian](#)

ApJL 890 L2 2020

<https://arxiv.org/pdf/2001.08595.pdf>

[sci-hub.si/10.3847/2041-8213/ab6f0a](https://arxiv.org/pdf/2001.08595.pdf)

26 May

GONG Catalog of Solar Filament Oscillations Near Solar Maximum

Manuel [Luna](#), [Judith Karpen](#), [José Luís Ballester](#), [Karin Muglach](#), [Jaume Terradas](#), [Therese Kucera](#), [Holly Gilbert](#)

Astrophysical Journal Supplement Series 2018

<https://arxiv.org/pdf/1804.03743.pdf>

26 May-1 Jun

Comparison of Two Methods for Deriving the Magnetic Field in a Filament Channel

T. A. [Kucera](#)¹, M. Luna², T. Török³, K. Muglach^{1,4}, J. T. Karpen¹, C. Downs³, X. Sun⁵, B. J. Thompson¹, and H. R. Gilbert⁶

2022 ApJ 940 34

<https://iopscience.iop.org/article/10.3847/1538-4357/ac9377/pdf>

27-30 May

Interferometric Observations of the Quiet Sun at 20 and 25 MHz in May 2014

V.N. [Melnik](#), [V.A. Shepelev](#), [S. Poedts](#), [V.V. Dorovskyy](#), [A.I. Brazhenko](#), [H.O. Rucker](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1806.08660.pdf>

28 May

Launch of a CME-associated eruptive prominence as observed with IRIS and ancillary instruments*

P. [Zhang](#), É. Buchlin and J.-C. Vial

A&A 624, A72 (2019)

<https://www.aanda.org/articles/aa/pdf/2019/04/aa34259-18.pdf>

[sci-hub.se/10.1051/0004-6361/201834259](https://www.aanda.org/articles/aa/pdf/2019/04/aa34259-18.pdf)

29 May

Interferometer Observations of Solar Type III Bursts by the Radio Telescope UTR-2

Valentin [Melnik](#) ¹, Valerii Shepelev ¹, Anatolii Brazhenko ², Vladimir Dorovskyy ¹, Helmut Rucker ³, Stefaan Poedts

Sun and Geosphere, 2017; 12/2: 105 -109

http://newserver.stil.bas.bg/SUNGEO/00SGArhiv/SG_v12_No2_2017-pp-105-109.pdf

30 May – небольшой форбуш

An Analytical Diffusion-Expansion Model for Forbush Decreases Caused by Flux Ropes

Mateja [Dumbović](#), [Bernd Heber](#), [Bojan Vršnak](#), [Manuela Temmer](#), [Anamarija Kirin](#)

2018

<https://arxiv.org/pdf/1805.00916.pdf>

GONG Catalog of Solar Filament Oscillations Near Solar Maximum

Manuel [Luna](#), [Judith Karpen](#), [José Luís Ballester](#), [Karin Muglach](#), [Jaume Terradas](#), [Therese Kucera](#), [Holly Gilbert](#)

Astrophysical Journal Supplement Series 2018

<https://arxiv.org/pdf/1804.03743.pdf>

2 June

Interferometer Observations of Solar Type III Bursts by the Radio Telescope UTR-2

Valentin [Melnik](#) 1, Valerii Shepelev 1, Anatolii Brazhenko 2, Vladimir Dorovskyy 1, Helmut Rucker 3, Stefaan Poedts

Sun and Geosphere, 2017; 12/2: 105 -109

http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG_v12_No2_2017-pp-105-109.pdf

3 June

Why Do Chromospheric Oscillations in Sunspot Umbrae Appear to Propagate Downward?

Jongchul [Chae](#)3,1, Eun-Kyung Lim2, Kyeore Lee1, Hannah Kwak2, Kyoung-Sun Lee1, Juhyung Kang1, and Soosang Kang1

2023 ApJL 944 L52

<https://iopscience.iop.org/article/10.3847/2041-8213/acba7d/pdf>

Propagating Alfvénic Waves Observed in the Chromosphere around a Small Sunspot: Tales of 3-minute Waves and 10-minute Waves

Jongchul [Chae](#)1, Kyuhyoun Cho1,2,3, Eun-Kyung Lim4, and Juhyung Kang1,4

2022 ApJ 933 108

<https://iopscience.iop.org/article/10.3847/1538-4357/ac722e/pdf>

The Physical Nature of Spiral Wave Patterns in Sunspots

Juhyung [Kang](#)1, Jongchul Chae1, Valery M. Nakariakov2,3, Kyuhyoun Cho1, Hannah Kwak1, and Kyeore Lee1

2019 ApJL 877 L9

sci-hub.se/10.3847/2041-8213/ab1f6c

4 June – ~17 UT: заметная SE эрупция волокна, 304 A, крупный CME

Крупная эрупция SE волокна – Hyder flare

See <http://thewatchers.adorraeli.com/2014/06/05/huge-solar-filament-collapses-hyder-flare-june-4-2014/>

<http://www.stce.be/newsletter/pdf/2014/STCENews20141107.pdf>

4-13 June

Solar Farside Magnetograms from Deep Learning Analysis of STEREO/EUVI Data

[Kim](#), T., Park, E., Lee, H., et al.

2019, Nature Astronomy,

<http://sci-hub.se/10.1038/s41550-019-0711-5>

5 June

Magnetic Relaxation Seen in a Rapidly Evolving Light Bridge in a Sunspot

Donguk [Song](#)1,2, Eun-Kyung Lim1, Jongchul Chae3, Yeon-Han Kim1, Yukio Katsukawa2, and Vasyl Yurchyshyn4

2024 ApJ 962 75

<https://iopscience.iop.org/article/10.3847/1538-4357/ad1ab0/pdf>

The Nature of High-frequency Oscillations Associated with Short-lived Spicule-type Events

Juie **Shetye**^{1,2}, Erwin Verwichte³, Marco Stangalini⁴, and J. G. Doyle²

ApJ 2021 921 30

<https://iopscience.iop.org/article/10.3847/1538-4357/ac1a12/pdf>

<https://doi.org/10.3847/1538-4357/ac1a12>

Magnetic Flux Cancellation in Ellerman Bombs

A. **Reid**, M. Mathioudakis, J. G. Doyle, E. Scullion, V. Henriques, C. Nelson, T. Ray

ApJ 2016

<http://arxiv.org/pdf/1603.07100v1.pdf>

High-cadence observations of spicular-type events on the Sun

J. **Shetye**, J.G. Doyle, E. Scullion, C. J. Nelson, D. Kuridze, V. Henriques, F. Woeger, T. Ray

A&A 2016

<http://arxiv.org/pdf/1601.08087v1.pdf>

6 June

Chromospheric Plasma Ejections in a Light Bridge of a Sunspot

Donguk **Song**, Jongchul Chae, Vasyl Yurchyshyn, Eun-Kyung Lim, Kyung-Suk Cho, Heesu Yang, Kyuhyoun Cho, Hannah Kwak

ApJ 2017

<https://arxiv.org/pdf/1701.06808v1.pdf>

7 June

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

The Nature of High-frequency Oscillations Associated with Short-lived Spicule-type Events

Juie **Shetye**^{1,2}, Erwin Verwichte³, Marco Stangalini⁴, and J. G. Doyle²

ApJ 2021 921 30

<https://iopscience.iop.org/article/10.3847/1538-4357/ac1a12/pdf>

<https://doi.org/10.3847/1538-4357/ac1a12>

Automated Detection of Chromospheric Swirls Based on Their Morphological Characteristics

[Ioannis Dakanalis](#), [Georgia Tsiropoula](#), [Kostas Tziotziou](#) & [Konstantinos Koutroumbas](#)

[Solar Physics](#) volume 296, Article number: 17 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01748-3.pdf>

A persistent quiet-Sun small-scale tornado. II. Oscillations

K. **Tziotziou**, [G. Tsiropoula](#), [I. Kontogiannis](#)

A&A 2019

<https://arxiv.org/pdf/1903.04796.pdf>

A persistent quiet-Sun small-scale tornado

I. Characteristics and dynamics*

K. **Tziotziou**¹, [G. Tsiropoula](#)¹, [I. Kontogiannis](#)², E. Scullion³ and J. G. Doyle

A&A 618, A51 (2018)

sci-hub.tw/10.1051/0004-6361/201833101

First simultaneous SST/CRISP and IRIS observations of a small-scale quiet Sun vortex

S.-H. **Park**, [G. Tsiropoula](#), [I. Kontogiannis](#), [K. Tziotziou](#), E. Scullion, J.G. Doyle

A&A 2015

<http://arxiv.org/pdf/1512.06032v1.pdf>

8 June – геомагнитная буря $Dst \sim -47$ nT и довольно большой форбуш от эрупции 4-ого

10 June – 11:41: X2.2 вспышка, **пересвет** на STEREO-B, $B=40 \cdot 2/299=0,27$

2-элементный от очень импульсной

вспышки

12:56: X1.5 вспышка, **пересвет** на STEREO-B, $B=35 \cdot 2/299=0,23$

широкий, многоэлементный от LDE

вспышки

Т.е. формально для STEREO-B центры оптических вспышек были на долготях E82–84. Однако, вид вспышечных структур (в том числе на SDO) наводит на заключение, что основная часть EUV вспышки для STEREO-B была за западным лимбом. Это возможно, если для GOES и SDO основные структуры вспышек были на гелиодолготах $E < 74$!

См. **2014-06-10_notes.doc** и

RHESSI Science Nugget, No. 228, June 2014

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

10 June - DOUBLE X-FLARE: A new sunspot (AR2087) suddenly emerging from behind the sun's southeastern limb erupted twice, producing a **very impulsive (spike)** X2.2-flare at 11:42 UT (**S15~2200**) and a short-duration X1.5-flare at 12:52 (**S9~3300**). An asymmetric full halo CME was observed after the X flares in AR 12087. **Gamma**

Why could a new-born active region produce coronal mass ejections?

[Hanzhao Yang](#), [Lijuan Liu](#)

ApJ 2024

<https://arxiv.org/pdf/2407.19710>

Search for superstrong magnetic fields in active processes on the Sun using spectropolarimetry within 15 Å around the D3 line

[I I Yakovkin](#), [V G Lozitsky](#)

MNRAS, Volume 523, Issue 4, August 2023, Pages 5812–5822,

<https://doi.org/10.1093/mnras/stad1816>

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>

Plasma heating and nanoflare caused by slow-mode wave in a coronal loop

[Fanxiaoyu Xia](#), [Tongjiang Wang](#), [Yang Su](#), [Jie Zhao](#), [Qingmin Zhang](#), [Astrid M. Veronig](#), [Weiqun Gan](#)

ApJL 2022

<https://arxiv.org/pdf/2208.10029.pdf>

Dispersion of small magnetic elements inside active regions on the Sun

Valentina I. [Abramenko](#)

MNRAS 2018

<https://arxiv.org/pdf/1812.05469.pdf>

Recent Voyager Evidence for Rapid Transport of Flare-Generated Disturbances by Polar Coronal Hole Streams

D S **Intriligator**¹, W D Miller¹, J Intriligator^{1,2}, W Webber³, W Sun⁴, T Detman¹, M Dryer¹ and C Deehr⁴

Journal of Physics: Conference Series, Volume 900, Number 1 012010 2017
<http://iopscience.iop.org/article/10.1088/1742-6596/900/1/012010/pdf>

High-frequency transverse oscillations and intensity perturbations in spicular-type events

J. **Shetye**, D. Kuridze, M. Stangalini, J. G. Doyle, E. Scullion, V. Henriques, T. Ray
A&A 2017

https://star.arm.ac.uk/~jus/outgoing/accepted_papers/fast_features_waves_V12.pdf

Explosive events in active region observed by IRIS and SST/CRISP

Z. **Huang**, M. S. Madjarska, E. M. Scullion, **L.-D. Xia**, **J. G. Doyle**, **T. Ray**
MNRAS Volume 464, Issue 2, p.1753-1761 2017

<https://arxiv.org/pdf/1609.07698v1.pdf>

High-cadence observations of spicular-type events on the Sun

J. **Shetye**, J.G. Doyle, E. Scullion, C. J. Nelson, D. Kuridze, V. Henriques, F. Woeger, T. Ray
A&A 2016

<http://arxiv.org/pdf/1601.08087v1.pdf>

Daily solar mm-observations at Aalto University Metsahovi Radio Observatory

Juha **Kallunki** and Minttu Uunila:

RHESSI Nugget No. 248, March 2015

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Daily_solar_mm-observations_at_Aalto_University_Metsahovi_Radio_Observatory

Mysteries of Flare/CME Initiation

Interesting

Shaun **Bloomfield** and Hugh Hudson

RHESSI Science Nugget, No. 228, June 2014

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

10-12 Jun

Why could a new-born active region produce coronal mass ejections?

Hanzhao Yang, **Lijuan Liu**

ApJ 2024

<https://arxiv.org/pdf/2407.19710>

11 June – Ещё 3 короткие вспышки балла M3, X1 и M3.9 из той же восточной области.

Gamma

Generic low-atmosphere signatures of swirled-anemone jets

Joshi, Reetika ; Aulanier, Guillaume ; Radcliffe, Alice ; Rouppe van der Voort, Luc ; Pariat, Etienne ; Nóbrega-Siverio, Daniel ; Schmieder, Brigitte

A&A 2024

<https://arxiv.org/pdf/2404.13171>

The Slipping Magnetic Reconnection and Damped Quasiperiodic Pulsations in a Circular Ribbon Flare

Jing **Huang**^{1,2,3}, Baolin Tan^{1,2,3}, Yin Zhang^{1,2}, Xiaoshuai Zhu², Shangbin Yang^{1,2,3}, and Yuanyong Deng^{1,2},

2024 ApJ 965 137

<https://iopscience.iop.org/article/10.3847/1538-4357/ad3353/pdf>

Identifying preflare spectral features using explainable artificial intelligence

Brandon Panos, **Lucia Kleint**, **Jonas Zbinden**

A&A 2023

<https://arxiv.org/pdf/2301.01560.pdf>

Differential Emission Measure Evolution as a Precursor of Solar Flares

C. [Gontikakis](#) (1), [I. Kontogiannis](#) (2), [M.K. Georgoulis](#) (1,3), [C. Guennou](#) (4), [P. Syntelis](#) (5), [S.H. Park](#) (6), [E. Buchlin](#)

2020

<https://arxiv.org/pdf/2011.06433.pdf>

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

Multi-wavelength observations of the 2014 June 11 M3.9 flare: temporal and spatial characteristics

Damian J. [Christian](#), [David Kuridze](#), [David B. Jess](#), [Menoa Yousefi](#), [Mihalis Mathioudakis](#)

Research in Astronomy and Astrophysics **2018**

<https://arxiv.org/pdf/1811.07077.pdf>

Reproducing Type II White-Light Solar Flare Observations with Electron and Proton Beam Simulations

[Ondřej Procházka](#), [Aaron Reid](#), [Ryan O. Milligan](#), [Paulo J. A. Simões](#), [Joel C. Allred](#), [Mihalis Mathioudakis](#)

2018

<https://arxiv.org/pdf/1806.00249.pdf>

Magnetic braids in eruptions of a spiral structure in the solar atmosphere

Zhenghua [Huang](#), [Lidong Xia](#), [Chris J. Nelson](#), [Jiajia Liu](#), [Thomas Wiegmann](#), [Hui Tian](#), [James A. Klimchuk](#), [Yao Chen](#), [Bo Li](#)

ApJ **2018**

<https://arxiv.org/pdf/1801.05967.pdf>

Suppression of Hydrogen Emission in an X-class White-light Solar Flare

Ondřej [Procházka](#)¹, Ryan O. Milligan^{1,2,3}, Joel C. Allred², Adam F. Kowalski^{4,5}, Pavel Kotrč⁶, and Mihalis Mathioudakis

2017 ApJ 837 46

<http://sci-hub.cc/10.3847/1538-4357/aa5da8>

Observations and simulations of the Na I D1 line profiles in an M-class solar flare

D. [Kuridze](#), M. Mathioudakis, D. J. Christian, [A. F. Kowalski](#), [D. B. Jess](#), [S. D. T. Grant](#), [T. Kawate](#), [P. J. A. Simões](#), [J. C. Allred](#), [F. P. Keenan](#)

ApJ **2016**

<http://arxiv.org/pdf/1609.08120v1.pdf>

New Observations of Balmer Continuum Flux in Solar Flares, Instrument Description and First Results

P. [Kotrč](#), O. Procházka, P. Heinzel

Solar Physics **2016**

<http://arxiv.org/pdf/1601.04610v1.pdf>

12 June – Ещё несколько коротких M вспышек из двух областей. А в конце дня из западной области **M3.1 LDE** вспышка; только она дала маленькие протоны. At least a partial halo CME was observed after the M3 LDE in AR 12085 late in the day.

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://doi.org/10.3389/fspas.2019.00018)

<https://www.frontiersin.org/articles/10.3389/fspas.2019.00018/full>

Statistical Study of Chromospheric Evaporation in Impulsive Phase of Solar Flares

[Viacheslav M Sadykov](#), [Alexander G Kosovichev](#), [Ivan N Sharykin](#), [Graham S Kerr](#)

ApJ 2018

<https://arxiv.org/pdf/1805.10729.pdf>

Observational Investigation of Energy Release in the Lower Solar Atmosphere of a Solar Flare

I. N. **Sharykin**, V. M. Sadykov, A. G. Kosovichev, S. Vargas-Dominguez, I. V. Zimovets

2016

<http://arxiv.org/pdf/1604.05380v1.pdf>

Formation and Eruption of a Small Flux Rope in the Chromosphere Observed by NST, IRIS, and SDO

Pankaj **Kumar**, Vasyl Yurchyshyn, Haimin Wang, Kyung-Suk Cho

ApJ 2015

<http://arxiv.org/pdf/1507.01761v1.pdf>

Properties of Chromospheric Evaporation and Plasma Dynamics of a Solar Flare from Iris

Viacheslav M. **Sadykov**^{1,2,3,4}, Santiago Vargas Dominguez^{1,5}, Alexander G. Kosovichev^{1,2}, Ivan N. Sharykin³, Alexei B. Struminsky^{3,4}, and Ivan Zimovets

2015 ApJ 805 167

Analysis of IRIS and NST observations of the 12.06.2014 flare event

Viacheslav M. **Sadykov**, Santiago Vargas Dominguez, Alexander G. Kosovichev, Ivan N. Sharykin

2014

<http://arxiv.org/pdf/1412.0172v1.pdf>

12-13 June

Statistical Study of Chromospheric Evaporation in Impulsive Phase of Solar Flares

[Viacheslav M Sadykov](#), [Alexander G Kosovichev](#), [Ivan N Sharykin](#), [Graham S Kerr](#)

ApJ 2018

<https://arxiv.org/pdf/1805.10729.pdf>

Transverse oscillations in slender Ca II H fibrils observed with Sunrise/SuFI

Shahin **Jafarzadeh**, S. K. Solanki, R. Gafeira, M. van Noort, P. Barthol, J. Blanco Rodriguez, J. C. del Toro Iniesta, A. Gandorfer, L. Gizon, J. Hirzberger, M. Knoelker, D. Orozco Suarez, T. L. Riethmueller, W. Schmidt

Astrophysical Journal Supplement Series 2016

<https://arxiv.org/pdf/1610.07449v1.pdf>

13 June

Comparative analysis of solar radio bursts before and during CME propagation

G. **Dididze**, [B.M. Shergelashvili](#), [V.N. Melnik](#), [V.V. Dorovskyy](#), [A.I. Brazhenko](#), [S. Poedts](#), [T.V. Zaqarashvili](#), [M. Khodachenko](#)

A&A 2019

<https://arxiv.org/pdf/1903.12279.pdf>

14 June – 19:31: M1.4 вспышка, **пересвет** на STEREO-B, $B=14*2/300=0,09$
DIRECT DETECTION OF THE HELICAL MAGNETIC FIELD GEOMETRY FROM 3D RECONSTRUCTION OF PROMINENCE KNOT TRAJECTORIES
Maciej **Zapiór** and David Martínez-Gómez
2016 ApJ 817 123

On the Variation of Volumetric Evolution of CMEs from Inner to Outer Corona
[Satabdwa Majumdar](#), [Ritesh Patel](#), [Vaibhav Pant](#)
ApJ 2022
<https://arxiv.org/pdf/2202.11924.pdf>

15 June – 12:16: M1.1 вспышка, **пересвет** на STEREO-B, $B=0,08$ $\leftarrow -16s$ $8s \rightarrow 11:51$ $B=0.06$

По линейным картинкам

14-15 June

On the Nature of the Three-part Structure of Solar Coronal Mass Ejections
[Hongqiang Song](#), [Jie Zhang](#), [Leping Li](#), [Zihao Yang](#), [Lidong Xia](#), [Ruisheng Zheng](#), [Yao Chen](#)
ApJ 2022
<https://arxiv.org/pdf/2212.04013.pdf>

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>

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>

June 15: A CME was observed after the C5 event in AR 12092. While the core of this fairly narrow CME was headed to the southeast,

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions
[Jiong Qiu](#)
ApJ 2021
<https://arxiv.org/pdf/2101.11069.pdf>

Source Imaging of a Moving Type-IV Solar Radio Burst and its Role in Tracking Coronal Mass Ejection From the Inner to the Outer Corona
V. **Vasanth**, [Yao Chen](#), [Maoshui Lv](#), [Hao Ning](#), [Chuangyang Li](#), [Shiwei Feng](#), [Zhao Wu](#), [Guohui Du](#)
2019 ApJ 870 30
<https://arxiv.org/pdf/1810.11815.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>

16 June, залимбовый пересвет 02:16 \leftarrow 16s 8s \rightarrow $A=61/312=0.2$
02:11 примерно такой же

16 June

Automatic detection technique for solar filament oscillations in GONG data

M. Luna^{1,2}, J. R. Mérou Mestrel^{1,2} and F. Auchère³

A&A 666, A195 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/10/aa44181-22.pdf>

<https://arxiv.org/pdf/2209.05087.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>

17 June A partial halo CME was observed after a C4 (03:31) flare in AR 12087.

Fast downflows in a chromospheric filament

K. Sowmya, A. Lagg, S. K. Solanki, J. S. Castellanos Durán

Proceedings of IAUS 354 2019)

<https://arxiv.org/pdf/1912.06586.pdf>

Spectropolarimetric analysis of an active region filament. I. Magnetic and dynamical properties from single component inversions

C. J. Díaz Baso, M. J. Martínez González, A. Asensio Ramos

A&A 2019

<https://arxiv.org/pdf/1904.09593.pdf>

Chromospheric counterparts of solar transition region unresolved fine structure loops

Tiago M. D. Pereira, Luc Rouppe van der Voort, Viggo H. Hansteen, Bart De Pontieu

A&A 2018

<https://arxiv.org/pdf/1803.04415.pdf>

See Pereira, T. M. D., Rouppe van der Voort, L., & Carlsson, M. 2016, ApJ, 824, 65

17-18 June - форбуш

18 June, залимбовый пересвет 18:16 \leftarrow 16s 8s \rightarrow $A=42/312=0.13$ <0.2 не берём
8s \rightarrow 18:11 $A=30*2/312=0.19$

18 June - A minor (G1-class) geomagnetic storm (Dst~-(33-41) nT) is in progress due to unsettled solar wind conditions. A disturbance, possibly with a coronal hole origin, arrived after 16h UTC and caused unsettled to active conditions.

19 June – A large SE filament eruption began just after 15h UTC just north of ARs 12093/S3538.

Сильные глобальные возмущения на 304 А. A partial halo CME was observed.

Development of Torus and Kink Instabilities in Eruptive Prominences

Boris Filippov

2024 ApJ 977 259

<https://iopscience.iop.org/article/10.3847/1538-4357/ad95fe/pdf>

23 June - Arriving about a day later than expected, a CME hit Earth's magnetic field on June 23rd at 2300 UT. A weak solar wind shock was observed at 22:00 UTC at SOHO, the low solar wind speed indicates that this may have been the arrival of the June 19 CME.

24 June

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>

25 June

Upper Chromospheric Magnetic Field of a Sunspot Penumbra: Observations of Fine Structure

J. [Joshi](#), A. Lagg, S. K. Solanki, [A. Feller](#), [M. Collados](#), [D. Orozco Suárez](#), [R. Schlichenmaier](#), [M. Franz](#), [H. Balthasar](#), [C. Denker](#), [T. Berkefeld](#), [A. Hofmann](#), [C. Kiess](#), [H. Nicklas](#), [A. Pastor Yabar](#), [R. Rezaei](#), [D. Schmidt](#), [W. Schmidt](#), [M. Sobotka](#), [D. Soltau](#), [J. Staude](#), [K. G. Strassmeier](#), [R. Volkmer](#), [O. von der Lühe](#), [T. Waldmann](#)

A&A 2016

<http://arxiv.org/pdf/1608.01988v1.pdf>

26 Jun

On the Variation of Volumetric Evolution of CMEs from Inner to Outer Corona

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

ApJ 2022

<https://arxiv.org/pdf/2202.11924.pdf>

26-27 June - During the early hours of June 27th, a series of bright CMEs billowed over the sun's northern limb. STEREO probes saw the eruptions that gave birth to these clouds; the blast sites were **on the farside of the sun**.

Three-dimensional structure of a sunspot light bridge

T. [Felipe](#), M. Collados, E. Khomenko, C. Kuckein, A. Asensio Ramos, H. Balthasar, T. Berkefeld, C. Denker, A. Feller, M. Franz, A. Hofmann, C. Kiess, A. Lagg, H. Nicklas, D. Orozco Suárez, A. Pastor Yabar, R. Rezaei, R. Schlichenmaier, D. Schmidt, W. Schmidt, M. Sigwarth, M. Sobotka, S. K. Solanki, D. Soltau, J. Staude, K. G. Strassmeier, R. Volkmer, O. von der Lühe, T. Waldmann

A&A 2016

<https://arxiv.org/pdf/1611.04803v1.pdf>

27 June

Detection of emission in the Si i 1082.7 nm line core in sunspot umbrae

D. Orozco [Suarez](#), [C. Quintero Noda](#), [B. Ruiz Cobo](#), [M. Collados Vera](#)

A&A 2017

<https://arxiv.org/pdf/1709.06773.pdf>

June 28-July 25

Simulating Solar Maximum Conditions Using the Alfvén Wave Solar Atmosphere Model (AWSoM)

Nishtha [Sachdeva](#)¹, Gábor Tóth¹, Ward B. Manchester¹, Bart van der Holst¹, Zhenguang Huang¹, Igor V. Sokolov¹, Lulu Zhao¹, Qusai Al Shidi¹, Yuxi Chen¹, Tamas I. Gombosi¹Show full author list

2021 ApJ 923 176

<https://iopscience.iop.org/article/10.3847/1538-4357/ac307c/pdf>
<https://doi.org/10.3847/1538-4357/ac307c>

Observations of Slow Solar Wind from Equatorial Coronal Holes

Y.-M. **Wang** and Y.-K. Ko

2019 ApJ 880 146

sci-hub.se/10.3847/1538-4357/ab2add

29 June

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>

Flux erosion of magnetic clouds by reconnection with the Sun's open flux

Sanchita **Pal**, [Soumyaranjan Dash](#), [Dibyendu Nandy](#)

Geophysical Research Letters, 47, Issue 8, e2019GL086372, 2020

<https://arxiv.org/pdf/2103.05990.pdf>

<https://doi.org/10.1029/2019GL086372>

Prediction of Flares within 10 Days before They Occur on the Sun

Nasibe **Alipour**, Faranak Mohammadi, and Hossein Safari

2019 ApJS 243 20

sci-hub.se/10.3847/1538-4365/ab289b

30 June, залимбовый пересвет 17:01 $B=39 \times 2/300=0.26$

1 July

Observations of Instability-driven Nanojets in Coronal Loops

A. Ramada C. **Sukarmadji**¹, Patrick Antolin¹, and James A. McLaughlin¹

2022 ApJ 934 190

<https://iopscience.iop.org/article/10.3847/1538-4357/ac7870/pdf>

2 July MLSO Beautiful 3-part CME with structured prominence in northeast ~50 degrees PA from 17:12 to ~19:04 UT

http://www2.hao.ucar.edu/sites/default/files/images/mlso/gallery/20150702_1712_ne_cme_kcor_510x510_movie.gif

Synchronized Observations of Bright Points from the Solar Photosphere to Corona

Ehsan **Tavabi**

MNRAS 2018

<https://arxiv.org/ftp/arxiv/papers/1801/1801.01307.pdf>

3 Jul

Derivation and Application of a Scaling Between Hinode/SP and SDO/HMI Vector Magnetic Fields to Improve Magnetic Field Extrapolations

[C. Beck](#), [A. Prasad](#), [Q. Hu](#), [M. S. Yalim](#), [S. Gosain](#), [D.P. Choudhary](#)

ApJ 2024

<https://arxiv.org/pdf/2411.17649>

4 July

The formation of IRIS diagnostics VIII. IRIS observations in the C II 133.5 nm multiplet

Bhavna **Rathore**, Tiago M. D. Pereira, Mats Carlsson, Bart De Pontieu

ApJ 2015

<http://arxiv.org/pdf/1510.04845v1.pdf>

4-9 Jul

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

Suman K. **Dhakal**¹ and Jie Zhang¹

2024 ApJ 960 36

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

5 July

Decayless longitudinal oscillations of a solar filament maintained by quasi-periodic jets

[Y. W. Ni](#), [J. H. Guo](#), [Q. M. Zhang](#), [J. L. Chen](#), [C. Fang](#), [P. F. Chen](#)

A&A 2022

<https://arxiv.org/pdf/2203.15660.pdf>

Partial Eruption, Confinement, and Twist Buildup and Release of a Double-decker Filament

[Jialin Chen](#), [Yingna Su](#), [Rui Liu](#), [Bernhard Kliem](#), [Qingmin Zhang](#), [Haisheng Ji](#), [Tie Liu](#)

ApJ 923 142 2021

<https://arxiv.org/pdf/2111.13174.pdf>

<https://doi.org/10.3847/1538-4357/ac2ba1>

6-10 July

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 July

Diagnostic of Homologous Solar Surge Plasma as observed by IRIS and SDO

[Pradeep Kavshap](#), [Rajdeep Singh Payal](#), [Sharad C. Tripathi](#), [Harihara Padhy](#)

MNRAS 2021

<https://arxiv.org/pdf/2106.06222.pdf>

³He-rich solar energetic particles: Solar sources

Review

R. **Bucik**

Space Sci Rev 2020

<https://arxiv.org/pdf/2002.09442.pdf>

Spectroscopic and Stereoscopic Observations of the Solar Jets

Lei **Lu**, [Li Feng](#), [Ying Li](#), [Dong Li](#), [Zongjun Ning](#), [Weiqun Gan](#)

2019

<https://arxiv.org/pdf/1910.13649.pdf>

New Evidence that Magnetoconvection Drives Solar–Stellar Coronal Heating

Sanjiv K. **Tiwari**^{1,2,3,4}, Julia K. Thalmann⁵, Navdeep K. Panesar¹, Ronald L. Moore^{1,2}, and Amy R. Winebarger

2017 ApJL 843 L20

<http://iopscience.iop.org/sci-hub.cc/2041-8205/843/2/L20/>

New Evidence that Magnetoconvection Drives Solar-Stellar Coronal Heating

Sanjiv K. **Tiwari**, Julia K. Thalmann, Navdeep K. Panesar, [Ronald L. Moore](#), [Amy R. Winebarger](#)

ApJL 2017

<https://arxiv.org/pdf/1706.08035.pdf>

8 July – 16:20, M6.5/2B flare, N12E55, S5~200 sfu. The flare came as little surprise. A phalanx of large sunspots is crossing the solar disk, and forecasters have been predicting an explosion for more than a week. However, the source of the flare was unexpected. It came from a minor and seemingly harmless sunspot named AR2113.

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>

Current sheets in the wake of an eruption of two crossing filaments

Jun [Dai](#), [Jiayan Yang](#), [Leping Li](#), [Jun Zhang](#)

ApJ 2018

<https://arxiv.org/pdf/1811.08563.pdf>

Solar flare neutrons observed on the ground and in space

Alexander [MacKinnon](#)

RHESSI Science Nuggets #280 Aug 2016

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

Simultaneous Observation of Solar Neutrons from the ISS and High Mountain Observatories in association with a flare on July 8, 2014

Y. [Muraki](#), D. Lopez, [K. Koga](#), [F. Kakimoto](#), [T. Goka](#), [L.X. Gonzalez](#), [S. Masuda](#), [Y. Matsubara](#), [H. Matsumoto](#), [P. Miranda](#), [O. Okudaira](#), [T. Obara](#), [J. Salinas](#), [T. Sako](#), [S. Shibata](#), [R. Ticona](#), [Y. Tsunesada](#), [J.F. Valdes-Galicia](#), [K. Watanabe](#), [T. Yamamoto](#)

Solar Phys. 2016

Proceeding of the 34th International Cosmic Ray Conference in Hague in August, 2015, 2015

<http://arxiv.org/ftp/arxiv/papers/1508/1508.04923.pdf>

Solar Demon – an approach to detecting flares, dimmings, and EUV waves on SDO/AIA images

Emil [Kraaikamp](#)* and Cis Verbeeck

J. Space Weather Space Clim., 5, A18 (2015) File

<http://www.swsc-journal.org/articles/swsc/pdf/2015/01/swsc140062.pdf>

July 9: A partial halo CME was observed after the M1 flare at 00:26 in AR 12113 и после центральной эрупции в ~17 UT.

A closer look at a coronal loop rooted in a sunspot umbra

L. P. [Chitta](#), H. Peter, P. R. Young

A&A 2015

<http://arxiv.org/pdf/1512.03831v1.pdf>

July 10: A partial halo CME was observed after a morning filament eruption near the southwest limb.

12 July

НАБЛЮДЕНИЕ НЕОБЫЧНОГО СВЕТОВОГО ОБРАЗОВАНИЯ В ТЕНИ ПЯТНА NOAA 12109

[Ожогина](#) О.А.

Астрономия-2018 Том 2 Солнечно-земная физика – современное состояние и перспективы С.182

<http://www.izmiran.ru/library/eaas2018/eaas-2018-2.pdf>

Dynamics of on-disk plumes as observed with Interface Region Imaging Spectrograph, Atmospheric Imaging Assembly and Helioseismic and Magnetic Imager

Vaibhav **Pant**, Laurent Dolla, Rakesh Mazumder, [Dipankar Banerjee](#), [S. Krishna Prasad](#), [Vemareddy Panditi](#)

ApJ 2015

<http://arxiv.org/pdf/1505.04473v1.pdf>

12-13 July

Absolute velocity measurements in sunspot umbrae

[J. Löhner-Böttcher](#), [W. Schmidt](#), [R. Schlichenmaier](#), [H.-P. Doerr](#), [T. Steinmetz](#), [R. Holzwarth](#)

A&A 2018

<https://arxiv.org/pdf/1804.08304.pdf>

14 July

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>

15 July

On the Physical Nature of the so-Called Prominence Tornadoes **Review**

Stanislav **Gunár**, [Nicolas Labrosse](#), [Manuel Luna](#), [Brigitte Schmieder](#), [Petr Heinzl](#), [Therese A. Kucera](#), [Peter J. Levens](#), [Arturo López Ariste](#), [Duncan H. Mackay](#) & [Maciej Zapiór](#)

[Space Science Reviews](#) volume 219, Article number: 33 (2023)

<https://link.springer.com/content/pdf/10.1007/s11214-023-00976-w.pdf>

Comparing UV/EUV line parameters and magnetic field in a quiescent prominence with tornadoes

P. J. **Levens**, [N. Labrosse](#), [B. Schmieder](#), [A. López Ariste](#), [L. Fletcher](#)

A&A 2017

<https://arxiv.org/pdf/1708.04606.pdf>

Magnetic field in atypical prominence structures: Bubble, tornado and eruption

P. J. **Levens**, B. Schmieder, A. López Ariste, N. Labrosse, K. Dalmasse, B. Gelly

2016

<http://arxiv.org/pdf/1605.05964v1.pdf>

On the plasma and magnetic field structure of prominence legs

Peter **Levens**, Nicolas Labrosse, Brigitte Schmieder & Arturo López Ariste

UKSP Nugget #55, March 2015

<http://www.uksolphys.org/?p=9654>

Structure of prominence legs: Plasma and magnetic field

P. J. **Levens**, B. Schmieder, N. Labrosse, A. López Ariste

2015

<http://arxiv.org/pdf/1512.04727v1.pdf>

17 July

Strong non-radial propagation of energetic electrons in solar corona

A. **Klassen**, N. Dresing, R. Gómez-Herrero, B. Heber, and A. Veronig

A&A 2018

http://www.ieap.uni-kiel.de/et/people/klassen/32041_Klassen.pdf

³He-Rich Solar Energetic Particles in Helical Jets on the Sun

Radoslav [Bucik](#), [Davina E. Innes](#), [Glenn M. Mason](#), [Mark E. Wiedenbeck](#), [Raul Gomez-Herrero](#), [Nariaki V. Nitta](#)

ApJ 2017
<https://arxiv.org/pdf/1711.09394.pdf>

Reconstruction of a helical prominence in 3D from IRIS spectra and images

B. [Schmieder](#), M. Zapiór A. López Ariste, P. Levens, [N. Labrosse](#), [R. Gravet](#)

A&A 2017
<https://arxiv.org/pdf/1706.08078.pdf>

18 July

Sequential eruptions triggered by flux emergence - observations and modeling

Sally [Dacie](#), [Tibor Torok](#), [Pascal Demoulin](#), [Mark Linton](#), [Cooper Downs](#), [Lidia van Driel-Gesztelyi](#), [David Long](#), [James Leake](#)

ApJ 2018
<https://arxiv.org/pdf/1807.00020.pdf>

Horizontal flow fields in and around a small active region-- The transition period between flux emergence and decay

M. [Verma](#), C. Denker, H. Balthasar, C. Kuckein, S.J. González Manrique, M. Sobotka, N. Bello González, S. Hoch, A. Diercke, P. Kummerow, T. Berkefeld, M. Collados, A. Feller, A. Hofmann, F. Kneer, A. Lagg, J. Löhner-Böttcher, H. Nicklas, A. Pastor Yabar, R. Schlichenmaier, D. Schmidt, W. Schmidt, M. Schubert, M. Sigwarth, S.K. Solanki, D. Soltau, J. Staude, K.G. Strassmeier, R. Volkmer, O. von der Lühse, T. Waldmann

A&A 2016
<http://arxiv.org/pdf/1605.07462v1.pdf>

Flows in and around active region NOAA12118 observed with the GREGOR solar telescope and SDO/HMI

M. [Verma](#), C. Denker, H. Balthasar, C. Kuckein, S.J. González Manrique, M. Sobotka, ASP Conf. Series - Coimbra solar physics meeting: Grounds-based solar observations in the space instrumentation era , I. Dorotovic, C. Fischer, and M. Temmer (eds.) 2016

<http://arxiv.org/pdf/1603.01109v1.pdf>

19 July

3He-rich solar energetic particles: Solar sources

Review

R. [Bucik](#)

Space Sci Rev 2020
<https://arxiv.org/pdf/2002.09442.pdf>

3He-Rich Solar Energetic Particles in Helical Jets on the Sun

Radoslav [Bucik](#), [Davina E. Innes](#), [Glenn M. Mason](#), [Mark E. Wiedenbeck](#), [Raul Gomez-Herrero](#), [Nariaki V. Nitta](#)

ApJ 2017
<https://arxiv.org/pdf/1711.09394.pdf>

20 July - During the early hours, a CME exploded from the far side (near the eastern limb) of the sun.

3He-Rich Solar Energetic Particles in Helical Jets on the Sun

Radoslav [Bucik](#), [Davina E. Innes](#), [Glenn M. Mason](#), [Mark E. Wiedenbeck](#), [Raul Gomez-Herrero](#), [Nariaki V. Nitta](#)

ApJ 2017
<https://arxiv.org/pdf/1711.09394.pdf>

21 Jul

Diffuse solar coronal features and their spicular footpoints

[Nikolina Milanović](#), [Lakshmi Pradeep Chitta](#), [Hardi Peter](#)

A&A 2023

<https://arxiv.org/pdf/2303.13161.pdf>

22-25 July

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

24 July

Asymmetry of the spectral lines of the coronal hole and quiet Sun in the transition region

Razieh [Hosseini](#), [Pradeep Kayshap](#), [Nasibe Alipour](#), [Hossein Safari](#)

MNRAS 2024

<https://arxiv.org/pdf/2402.01628.pdf>

A Model for the Coupled Eruption of a Pseudostreamer and Helmet Streamer

[P. F. Wyper](#), [S. K. Antiochos](#), [C. R. DeVore](#), [B. J. Lynch](#), [J. T. Karpen](#), [P. Kumar](#)

ApJ 2021

<https://arxiv.org/pdf/2101.01962.pdf>

Coronal heating and solar wind formation in quiet Sun and coronal holes: a unified scenario

[Durgesh Tripathi](#), [V. N. Nived](#), [Sami K Solanki](#)

ApJ 2020

<https://arxiv.org/pdf/2011.09803.pdf>

25 July

Morphology of Solar Type II Bursts Caused by Shock Propagation through Turbulent and Inhomogeneous Coronal Plasma

Artem [Koval](#)¹, Aleksander Stanislavsky^{2,3}, Marian Karlický¹, Bing Wang⁴, Serge Yerin², Aleksander Konovalenko², and Miroslav Bárta¹

2023 ApJ 952 51

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

The Properties of the Solar Corona and Its Connection to the Solar Wind

Review

Steven R. [Cranmer](#) (CU Boulder), [Amy R. Winebarger](#) (NASA/MSFC)

Annual Review of Astronomy and Astrophysics, volume 57 (2019)

<https://arxiv.org/pdf/1811.00461.pdf>

26 July

Asymmetry of the spectral lines of the coronal hole and quiet Sun in the transition region

Razieh [Hosseini](#), [Pradeep Kayshap](#), [Nasibe Alipour](#), [Hossein Safari](#)

MNRAS 2024

<https://arxiv.org/pdf/2402.01628.pdf>

Coronal heating and solar wind formation in quiet Sun and coronal holes: a unified scenario

[Durgesh Tripathi](#), [V. N. Nived](#), [Sami K Solanki](#)

ApJ 2020
<https://arxiv.org/pdf/2011.09803.pdf>

27 July

High-resolution spectropolarimetric observations of the temporal evolution of magnetic fields in photospheric bright points

Peter H. [Keys](#), [Aaron Reid](#), [Mihalis Mathioudakis](#), [Sergiy Shelyag](#), [Vasco M. J. Henriques](#), [Rebecca L. Hewitt](#), [Dario Del Moro](#), [Shahin Jafarzadeh](#), [David B. Jess](#), [Marco Stangalini](#)
A&A 2019
<https://arxiv.org/pdf/1911.08436.pdf>

The magnetic properties of photospheric magnetic bright points with high resolution spectropolarimetry

Peter H. [Keys](#), [Aaron Reid](#), [Mihalis Mathioudakis](#), [Sergiy Shelyag](#), [Vasco M. J. Henriques](#), [Rebecca L. Hewitt](#), [Dario Del Moro](#), [Shahin Jafarzadeh](#), [David B. Jess](#), [Marco Stangalini](#)
MNRAS 2019
<https://arxiv.org/pdf/1906.07687.pdf>

A compact solar UV burst triggered in a magnetic field with a fan-spine topology

L. P. [Chitta](#), H. Peter, P. R. Young, Y.-M. Huang
A&A 2017
<https://arxiv.org/pdf/1706.08059.pdf>

sTools - a data reduction pipeline for the GREGOR Fabry-Pérot Interferometer and the High-resolution Fast Imager at the GREGOR solar telescope

C. [Kuckein](#) (1), C. Denker (1), M. Verma (1), [H. Balthasar](#) (1), [S. J. González Manrique](#) (1 and 2), [R. E. Louis](#) (1), [A. Diercke](#) (1 and 2) ((1) Leibniz-Institut für Astrophysik Potsdam, (2) Universität Potsdam, Institut für Physik and Astronomie)
Fine Structure and Dynamics of the Solar Atmosphere Proceedings IAU Symposium No. 327, 2017
<https://arxiv.org/pdf/1701.01670v1.pdf>

28 July

Transverse motions in sunspot super-penumbral fibrils

[R. J. Morton](#), [K. Moorooogen](#), [V. M. J. Henriques](#)
Special Issue of the Philosophical Transactions of the Royal Society A 2020
<https://arxiv.org/pdf/2012.07394.pdf>

Umbral chromospheric fine structure and umbral flashes modelled as one: the corrugated umbra

[Vasco M. J. Henriques](#), [Chris J. Nelson](#), [Luc H. M. Rouppe van der Voort](#), [Mihalis Mathioudakis](#)
A&A 2020
<https://arxiv.org/pdf/2008.05482.pdf>

Propagation of Waves above a Plage as Observed by IRIS and SDO

P. [Kayshap](#), [A.K. Srivastava](#), [S.K. Tiwari](#), [P. Jelinek](#), [M. Mathioudakis](#)
A&A 2019
<https://arxiv.org/pdf/1910.11557.pdf>

Chromospheric Inversions of a Micro-flaring Region

A. [Reid](#), V. Henriques, M. Mathioudakis, [J. G. Doyle](#), [T. Ray](#)
ApJ 2017
<https://arxiv.org/pdf/1707.00029.pdf>

The formation of small-scale umbral brightenings in sunspot atmospheres

C. J. **Nelson**, V. M. J. Henriques, M. Mathioudakis, F. P. Keenan
A&A **2017**
<https://arxiv.org/pdf/1705.05617.pdf>

July 30: A filament eruption in the northeast quadrant after 05h UTC was associated with a partial halo CME.

The formation of IRIS diagnostics VIII. IRIS observations in the C II 133.5 nm multiplet
Bhavna **Rathore**, Tiago M. D. Pereira, Mats Carlsson, Bart De Pontieu
ApJ **2015**
<http://arxiv.org/pdf/1510.04845v1.pdf>

31 July

Spectral Analysis of Solar Radio Type III Bursts from 20 kHz to 410 MHz
[K. Sasikumar Raja](#), [Milan Maksimovic](#), [Eduard P. Kontar](#), [Xavier Bonnin](#), [Philippe Zarka](#), [Laurent Lamy](#), [Hamish Reid](#), [Nicole Vilmer](#), [Alain Lecacheux](#), [Vratislav Krupar](#), [Baptiste Cecconi](#), [Lahmiti Nora](#), [Laurent Denis](#)
ApJ **2021**
<https://arxiv.org/pdf/2110.10935.pdf>

Round-Trip Slipping Magnetic Reconnection Observed in a Fan-Spine Jet
Yuandeng **Shen**, [Zhining Qu](#), [Chengrui Zhou](#), [Yadan Duan](#), [Zehao Tang](#), [Ding Yuan](#)
ApJL **2019**
<https://arxiv.org/pdf/1910.05472.pdf>

31 July -1 Aug

Solar science with the Atacama Large Millimeter/submillimeter Array - A revolutionizing new view of our Sun

Review

S. **Wedemeyer**, [T. Bastian](#), [R. Brajsa](#), [M. Barta](#), [H. Hudson](#), [G. Fleishman](#), [M. Loukitcheva](#), [B. Fleck](#), [E. P. Kontar](#), [B. De Pontieu](#), [S. K. Tiwari](#), [Y. Kato](#), [R. Soler](#), [P. Yagoubov](#), [J. H. Black](#), [P. Antolin](#), [E. Scullion](#), [S. Gun'ar](#), [N. Labrosse](#), [A. O. Benz](#), [H.-G. Ludwig](#), [P. Hauschildt](#), [J. G. Doyle](#), [V. M. Nakariakov](#), [S. K. Solanki](#), [S. M. White](#), [T. Ayres](#), [P. Heinzel](#), [M. Karlicky](#), [T. Van Doorselaere](#), [D. Gary](#), [C. E. Alissandrakis](#), [A. Nindos](#), [L. Rouppe van der Voort](#), [M. Shimojo](#), [T. Zaqarashvili](#), [E. Perez](#)
Space Sci. Rev. **2015**
<http://arxiv.org/pdf/1504.06887v2.pdf>

August 1: - A central filament eruption and coronal wave in the northern hemisphere 10:30-13:00 UTC was associated with a partial halo CME с **необычным боковым расширением на C3.**
- A weak halo CME was observed after an M1 flare in AR12127 at ~18 UT.

Magnetic Eruption from a Three-ribbon Flare

Ju **Jing**¹, Jeongwoo Lee¹, Mia Mancuso¹, Qin Li¹, Nian Liu¹, Satoshi Inoue¹, Yan Xu¹, and Haimin Wang¹
2024 ApJ 972 110
<https://iopscience.iop.org/article/10.3847/1538-4357/ad5ce3/pdf>

Propagation Properties of Sunspots Umbral Oscillations in Horizontal and Vertical Directions

Wei **Wu**^{1,2}, Jiang-tao Su^{1,2}, Jie Chen², Xiao-shuai Zhu³, and Robert Sych⁴
2023 ApJ 958 10

<https://iopscience.iop.org/article/10.3847/1538-4357/acf457/pdf>

Solar Flare Ribbon Fronts I: Constraining flare energy deposition with IRIS spectroscopy

[Vanessa Polito](#), [Graham S. Kerr](#), [Yan Xu](#), [Viacheslav M. Sadykov](#), [Juraj Lorincik](#)

<https://arxiv.org/pdf/2211.05333.pdf>

ApJ 2022

<https://arxiv.org/pdf/2211.05333.pdf>

A Primer on Focused Solar Energetic Particle Transport Basic Physics and Recent Modelling Results

Review

Jabus van den [Berg](#), [Du Toit Strauss](#) & [Frederic Effenberger](#)

[Space Science Reviews](#) volume 216, Article number: 146 (2020)

<https://link.springer.com/content/pdf/10.1007/s11214-020-00771-x.pdf>

High Resolution Observations of Solar Flares

Haimin [Wang](#)

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

Signatures of Magnetic Reconnection at the Footpoints of Fan-shaped Jets on a Light Bridge Driven by Photospheric Convective Motions

Xianyong [Bai](#)^{1,2}, Hector Socas-Navarro^{3,4}, Daniel Nóbrega-Siverio^{5,6}, Jiangtao

Su^{1,2}, Yuanyong Deng^{1,2}, Dong Li^{7,8}, Wenda Cao⁹, and Kaifan Ji¹

2019 ApJ 870 90

<http://iopscience.iop.org/article/10.3847/1538-4357/aaf1d1/pdf>

<https://arxiv.org/pdf/1811.03723.pdf>

Energy Build-up and Triggering Leading to a M1.5 Flare on 1 August 2014

S. [Liu](#), J. T. Su

[Solar Physics](#) December 2018, 293:167

Interplanetary transport of solar near-relativistic electrons on 2014 August 1 over a narrow range of heliolongitudes

Daniel [Pacheco](#), Neus Agueda, Raúl Gómez-Herrero and Angels Aran

J. Space Weather Space Clim. 2017, 7, A30

<https://www.swsc-journal.org/articles/swsc/pdf/2017/01/swsc170022.pdf>

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

Microwave Type III Pair Bursts in Solar Flares

Baolin [Tan](#), Hana Meszarosova, Marian Karlicky, Guangli Huang, Chengming Tan

ApJ 2016

<http://arxiv.org/pdf/1601.05312v1.pdf>

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>

Comparison of 30 THz impulsive burst time development to microwaves, H-alpha, EUV, and GOES soft X-rays

R. [Miteva](#), P. Kaufmann, D. P. Cabezas, M. M. Cassiano, L. O. T. Fernandes, S. L. Freeland, M. Karlicky, A. Kerdraon, A. S. Kudaka, M. L. Luoni, R. Marcon, J.-P. Raulin, G. Trottet, S. M. White
A&A 2015

<http://arxiv.org/pdf/1512.01763v1.pdf>

2 Aug

Penumbra Waves driving Solar chromospheric fan-shaped jets

A. [Reid](#), [V. M. J. Henriques](#), [M. Mathioudakis](#), [T. Samanta](#)

ApJL 2018

<https://arxiv.org/pdf/1802.07537.pdf>

2-4 Aug

Spectral Characteristics of the He I D3 Line in a Quiescent Prominence Observed by THEMIS

Július [Koza](#), Ján Rybák, Peter Gömöry, Matúš Kozák, Arturo López Ariste

[Solar Physics](#) August 2017, 292:98

<https://arxiv.org/pdf/1712.09255.pdf>

5 Aug

Propagation Properties of Sunspots Umbral Oscillations in Horizontal and Vertical Directions

Wei [Wu](#)^{1,2}, Jiang-tao Su^{1,2}, Jie Chen², Xiao-shuai Zhu³, and Robert Sych⁴

2023 ApJ 958 10

<https://iopscience.iop.org/article/10.3847/1538-4357/acf457/pdf>

High-precision Multichannel Solar Image Registration Using Image Intensity

Bo [Liang](#)¹, Xi Chen¹, Lan Yu², Song Feng^{6,1}, Yangfan Guo¹, Wenda Cao^{3,4}, Wei Dai¹, Yunfei Yang¹, and Ding Yuan⁵

2022 ApJS 261 10

<https://iopscience.iop.org/article/10.3847/1538-4365/ac7232/pdf>

Observations of Running Penumbra Waves emerging in a Sunspot

T.G. [Priya](#), [Wenda Cao](#), [Jiangtao Su](#), [Jie Chen](#), [Xinjie Mao](#), [Yuanyong Deng](#), [Robert Erdélyi](#)

ApJ 2017

<https://arxiv.org/pdf/1711.07145.pdf>

Statistical analysis on Dynamic Fibrils observed from NST/BBSO observations

T G [Priya](#), [Su Jiangtao](#), [Jie Chen](#), [Deng Yuanyong](#), [Debi Prasad Choudhury](#)

Research in Astron. Astrophys. (2012?) 2017

<https://arxiv.org/pdf/1711.06381.pdf>

8 Aug, залимбовый пересвет

16:16 \leftarrow 16s 8s \rightarrow $A=42/312=0.13$

<0.2 не берём

16:06 8s \rightarrow $A=23*2/312=0.15$

13 Aug

Further Evidence for the Minifilament-Eruption Scenario for Solar Polar Coronal Jets

[Tomi K. Baikie](#), [Alphonse C. Sterling](#), [Ronald L. Moore](#), [Amanda M. Alexander](#), [David A. Falconer](#), [Antonia Savcheva](#), [Sabrina L. Savage](#)

ApJ 2022

<https://arxiv.org/pdf/2201.08882.pdf>

14 Aug

Imaging observations of chromospheric evaporation in a circular-ribbon flare

Q. M. [Zhang](#), [D. Li](#), [Y. Huang](#)

ApJ 2018

<https://arxiv.org/pdf/1811.11363.pdf>

High-Cadence Imaging and Imaging Spectroscopy at the GREGOR Solar Telescope – A Collaborative Research Environment for High-Resolution Solar Physics

C. [Denker](#), [C. Kuckein](#), [M. Verma](#), [S. J. González Manrique](#), [A. Diercke](#), [H. Enke](#), [J. Klar](#), [H. Balthasar](#), [R. E. Louis](#), [E. Dineva](#)

Astrophysical Journal Supplement Series 2018

<https://arxiv.org/pdf/1802.10146.pdf>

15 Aug – ~>16 UT: значительная центральная/южная эрупция волокна; **волокно на 304 А вылетает через северный полюс**; слабое гало CME

16 Aug

Models and data analysis tools for the Solar Orbiter mission

A. Rouillard et al. (MADAWG team)

A&A 2019

<https://www.aanda.org/articles/aa/pdf/forth/aa35305-19.pdf>

Data-driven model of the solar corona above an active region

J. [Warnecke](#) and H. Peter

A&A 623, L12 (2019)

<https://www.aanda.org/articles/aa/pdf/2019/04/aa35385-19.pdf>

<https://arxiv.org/pdf/1903.00455.pdf>

17 Aug

Dynamics of Explosive Events Observed by the Interface Region Imaging Spectrograph

[E. Tavabi](#), [S. Zeighami](#) & [M. Heydari](#)

Solar Physics volume 297, Article number: 76 (2022)

<https://doi.org/10.1007/s11207-022-01990-x>

19-20 Aug – небольшая длительная буря по Dst, но с коротким выбросом Kp ~7

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

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>

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%2F941116-017-0009-6.pdf>

21 Aug – 13:31: M3.4 E-лииб вспышка

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>

Statistical Study of GOES X-ray Quasi-Periodic Pulsations in Solar Flares

Laura A. [Hayes](#), [Andrew R. Inglis](#), [Steven Christe](#), [Brian Dennis](#), [Peter T. Gallagher](#)

ApJ 2020

<https://arxiv.org/pdf/2004.11775.pdf>

EUV Waves Driven by Sudden Expansion of Transequatorial Loops Caused by Solar Coronal Jets

Yuandeng [Shen](#), [Zehao Tang](#), [Yuhu Miao](#), [Jiangtao Su](#), [Yu Liu](#)

ApJ 2018

<https://arxiv.org/pdf/1805.12309.pdf>

H-alpha features with hot onsets. II. A contrail fibril

R.J. [Rutten](#), L.H.M. Rouppe van der Voort

A&A 2016

<http://arxiv.org/pdf/1609.07616v1.pdf>

21-29 Aug

Absolute velocity measurements in sunspot umbrae

[J. Löhner-Böttcher](#), [W. Schmidt](#), [R. Schlichenmaier](#), [H.-P. Doerr](#), [T. Steinmetz](#), [R. Holzwarth](#)

A&A 2018

<https://arxiv.org/pdf/1804.08304.pdf>

Aug 21-Sep 17

Observations of Slow Solar Wind from Equatorial Coronal Holes

Y.-M. [Wang](#) and Y.-K. Ko

2019 ApJ 880 146

sci-hub.se/10.3847/1538-4357/ab2add

22 Aug – две небольшие центральные эрупции с корональными волнами
Тип II на нашем спектре

24 Aug – 12:17: восточная (S07E75) **M5.9/2B** вспышка/ эрупция, S5~630, и последующая SE эрупция, wide CME

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

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

The temporal and spatial evolution of MHD wave modes in sunspots

[A. B. Albidah](#), [V. Fedun](#), [A. A. Aldhafeeri](#), [I. Ballai](#), [D. B. Jess](#), [W. Brevis](#), [J. Higham](#), [M. Stangalini](#), [S. S. A. Silva](#), [C. D. MacBride](#), [G. Verth](#)

ApJ 2023

<https://arxiv.org/pdf/2305.19418.pdf>

О возможном различии в формировании корональных выбросов массы двух типов.

Еселевич В.Г., Еселевич М.В., Зимовец И.В.

СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА [Том 8. 2022. № 2](#) С. 12–22.

DOI : 10.12737/szf-82202202

<https://naukaru.ru/ru/storage/viewWindow/94294>

Magnetohydrodynamic wave mode identification in circular and elliptical sunspot umbrae: evidence for high order modes

[A. B. Albidah](#), [V. Fedun](#), [A. A. Aldhafeeri](#), [I. Ballai](#), [W. Brevis](#), [D. B. Jess](#), [J. Higham](#), [M. Stangalini](#), [S. S. A. Silva](#), [G. Verth](#)
ApJ 2022
<https://arxiv.org/pdf/2202.00624.pdf>

Space weather: the solar perspective -- an update to Schwenn (2006)

Review

[Manuela Temmer](#)

Living Reviews in Solar Physics 2021

<https://arxiv.org/pdf/2104.04261.pdf>

Fast degradation of the circular flare ribbon on 2014 August 24

Q. M. [Zhang](#), [S. H. Yang](#), [T. Li](#), [Y. J. Hou](#), [Y. Li](#)

A&A L 2020

<https://arxiv.org/pdf/2004.06837.pdf>

Subarcsecond blobs in flare-related coronal jets

Q. M. [Zhang](#), [L. Ni](#)

ApJ 2018

<https://arxiv.org/pdf/1811.08570.pdf>

Alfvén Wave Dissipation in the Solar Chromosphere

S. D. T. [Grant](#), [D. B. Jess](#), [T. V. Zaqrashvili](#), [C. Beck](#), [H. Socas-Navarro](#), [M. J. Aschwanden](#), [P. H. Keys](#), [D. J. Christian](#), [S. J. Houston](#), [R. L. Hewitt](#)

Nature Physics, 14, 480-483 (2018)

<https://arxiv.org/ftp/arxiv/papers/1810/1810.07712.pdf>

**ИССЛЕДОВАНИЕ НАЧАЛЬНОЙ СТАДИИ ФОРМИРОВАНИЯ “ИМПУЛЬСНОГО”
КОРОНАЛЬНОГО ВЫБРОСА МАССЫ**

[Еселевич В.](#), [Еселевич М.](#), [Зимовец И.](#), [Руденко Г.](#)

АЖ Т. 93 №11, 990- 2016

An imaging study of a complex solar coronal radio eruption

S. W. [Feng](#), Y. Chen, H. Q. Song, B. Wang, X. L. Kong

2016

<http://arxiv.org/pdf/1608.00073v1.pdf>

**Tracing the Chromospheric and Coronal Magnetic Field with AIA, IRIS, IBIS, and ROSA
Data**

M.J. [Aschwanden](#), K. Reardon, D. Jess

2016

<http://arxiv.org/pdf/1602.02119v1.pdf>

Observed Variability of the Solar Mg II h Spectral Line

Donald [Schmit](#), Paul Bryans, [Bart De Pontieu](#), [Scott McIntosh](#), [Jorrit Leenaarts](#), [Mats Carlsson](#)

2015

<http://arxiv.org/pdf/1508.04714v1.pdf>

Acceleration phases of a solar filament during its eruption

Hongqiang [Song](#), Yao Chen, Jie Zhang, Xin Cheng, Hui Fu, Gang Li

ApJL 2015

<http://arxiv.org/pdf/1504.06062v1.pdf>

RHESSI Resumes Observations

Albert [Shih](#), Säm Krucker

RHESSI Science Nugget, No. 234, 2014

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

25 Aug – 15:11: западная (N05W36) **M2.0/1B** вспышка, S3~150, a full halo CME
20:21: западная (N05W36) **M2.0/1B** вспышка, S9~310,

слабые мягкие протоны J10~0.1;

Active sunspot AR2146 erupted twice, producing two CMEs and a rapidfire pair of M-class solar flares (M2 @ 1511 UT and M3 @ 2021 UT).

Interferometric imaging, and beam-formed study of a moving Type IV Radio burst with LOFAR

[Hongyu Liu](#), [Pietro Zucca](#), [Kyung-Suk Cho](#), [Anshu Kumari](#), [Peijin Zhang](#), [Jasmina Magdalenic](#), [Rok-Soon Kim](#), [Sujin Kim](#), [Juhyung Kang](#)

Solar Phys. 2022

<https://arxiv.org/pdf/2208.13670.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>

Excitation of Langmuir waves at shocks and solar type II radio bursts

G. Mann¹, C. Vocks¹, A. Warmuth¹, J. Magdalenic^{2,3}, M. Bisi⁴, E. Carley⁵, B. Dabrowski⁶, P. Gallagher⁵, A. Krankowski⁶, B. Matyjasiak⁷, H. Rotkaehl⁷ and P. Zucca⁸

A&A 660, A71 (2022)

<https://doi.org/10.1051/0004-6361/202142201>

<https://www.aanda.org/articles/aa/pdf/2022/04/aa42201-21.pdf>

Fine Structure of a Solar Type II Radio Burst Observed by LOFAR

Jasmina Magdalenic¹, Christophe Marque¹, Richard A. Fallows², Gottfried Mann³, Christian Vocks³, Pietro Zucca², Bartosz P. Dabrowski⁴, Andrzej Krankowski⁴, and Valentin Melnik⁵
2020 ApJL 897 L15

[sci-hub.tw/10.3847/2041-8213/ab9abc](https://arxiv.org/abs/2008.08113)

<https://iopscience.iop.org/article/10.3847/2041-8213/ab9abc/pdf>

<https://doi.org/10.3847/2041-8213/ab9abc>

The Nature and Origin of Moving Solar Radio Bursts Associated with Coronal Mass Ejections

Diana Morosan, Emilia Kilpua, Erika Palmerio, Benjamin Lynch, Jens Pomoell, Rami Vainio, Minna Palmroth, Juska Räsänen

EGU2020 Presentation #5379 File

A 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>

Is the enhancement of type II radio bursts during CME interactions related to the associated solar energetic particle event?

Liu-Guan Ding, [Zhi-Wei Wang](#), [Li Feng](#), [Gang Li](#), [Yong Jiang](#)

Research in Astronomy and Astrophysics 2018

<https://arxiv.org/pdf/1808.04720.pdf>

Fine structure of a type II radio burst observed by LOFAR

Jasmina Magdalenic^{*1}, Christophe Marque², Richard Fallows³, Gottfried Mann⁴, Christian Vocks⁵, and Lofar Solar Ksp Core Members

26 Aug

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>

Quantifying weak non-thermal solar radio emission at low radio frequencies

Rohit **Sharma**, [Divya Oberoi](#), [Mihir Arjunwadkar](#)

ApJ 2017

<https://arxiv.org/pdf/1709.00878.pdf>

27 Aug – Буря Dst~-76 nT от двух CMEs 25-ого; в магоблаке почти все поле – южное Bz; сравнительно небольшой фобуш

Formation of a solar filament by magnetic reconnection and coronal condensation

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

ApJL 2021

<https://arxiv.org/pdf/2109.05669.pdf>

Excitation of coronal loop oscillations by coronal rain

Petra **Kohutova** and Erwin Verwichte

UKSP Nugget: 88, June 2018

<http://www.uksolphys.org/uksp-nugget/88-excitation-of-coronal-loop-oscillations-by-coronal-rain/>

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>

Magnetospheric transmissivity for cosmic rays during selected recent events with interplanetary/geomagnetic disturbances

Parnahaj, I. ; Bobík, P. ; Kudela, K.

Journal of Physics: Conference Series, Volume 632, Issue 1, article id. 012064 (2015).

28 Aug

On the Relative Brightness of Coronal Holes at Low Frequencies

M. M. **Rahman**, Patrick I. McCauley, Iver H. Cairns

[Solar Physics](#) January 2019, 294:7

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1396-8.pdf>

Is the enhancement of type II radio bursts during CME interactions related to the associated solar energetic particle event?

Liu-Guan **Ding**, [Zhi-Wei Wang](#), [Li Feng](#), [Gang Li](#), [Yong Jiang](#)

Research in Astronomy and Astrophysics 2018

<https://arxiv.org/pdf/1808.04720.pdf>

28-20 Aug

The Low-Frequency Solar Corona in Circular Polarization

Patrick I. [McCauley](#), [Iver H. Cairns](#), [Stephen M. White](#), [Surajit Mondal](#), [Emil Lenc](#), [John Morgan](#), [Divya Oberoi](#)

Solar Phys. 2019
<https://arxiv.org/pdf/1907.10878.pdf>

29 Aug

Multiwavelength observations of a breakout jet at an active region periphery

[Pradeep Kayshap](#), [Judith T. Karpen](#), [Pankaj Kumar](#)

Solar Phys. 2024
<https://arxiv.org/pdf/2405.04766>

Origin of Quasi-Periodic Pulsation at the Base of Kink Unstable Jet

[Sudheer K. Mishra](#), [Kartika Sangal](#), [Pradeep Kayshap](#), [Petr Jelinek](#), [A.K. Srivastava](#), [S.P. Rajaguru](#)

ApJ 2023
<https://arxiv.org/pdf/2301.01534.pdf>

A window into magnetic reconnection: IRIS observations of the consequences of reconnection during solar flares

Review

Katharine [Reeves](#)

Front. Astron. Space Sci. 9: 1041951. 2022
<https://doi.org/10.3389/fspas.2022.1041951>
<https://www.frontiersin.org/articles/10.3389/fspas.2022.1041951/pdf>

CUSP-SHAPED STRUCTURE OF A JET OBSERVED BY IRIS AND SDO

Yuzong [Zhang](#) and Jun Zhang

ApJ 834 79 2017
<http://iopscience.iop.org/article/10.3847/1538-4357/834/1/79/pdf>

Tether-cutting Reconnection between Two Solar Filaments Triggering Outflows and a Coronal Mass Ejection

Huadong [Chen](#), Jun Zhang, Leping Li, Suli Ma

ApJLetter 2016
<http://arxiv.org/pdf/1602.00378v1.pdf>

30 Aug

The Frequency-dependent Damping of Slow Magnetoacoustic Waves in a Sunspot Umbral Atmosphere

S. Krishna [Prasad](#), [D. B. Jess](#), [T. Van Doorselaere](#), [G. Verth](#), [R. J. Morton](#), [V. Fedun](#), [R. Erdelyi](#), [D. J. Christian](#)

ApJ 2017
<https://arxiv.org/pdf/1708.04835.pdf>

Tracing the Chromospheric and Coronal Magnetic Field with AIA, IRIS, IBIS, and ROSA Data

M.J. [Aschwanden](#), K. Reardon, D. Jess

2016
<http://arxiv.org/pdf/1602.02119v1.pdf>

High-resolution Observations of a Flux Rope with the Interface Region Imaging Spectrograph

Ting [Li](#), Jun Zhang

Solar Phys. 2015
<http://arxiv.org/pdf/1508.07409v1.pdf>

31 Aug

Statistical Analysis and Catalog of Non-polar Coronal Holes Covering the SDO-Era Using CATCH

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

Solar Phys. 294:144 2019

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

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1539-y.pdf>

Wavelet-Based Characterization of Small-Scale Solar Emission Features at Low Radio Frequencies

Akshay [Suresh](#), Rohit Sharma, Divya Oberoi, Srijan B. Das, Victor Pankratius, Brian Timar, Colin J. Lonsdale, Judd D. Bowman, Frank Briggs, Roger J. Cappallo, Brian E. Corey, ...

ApJ 843 19 2017

<https://arxiv.org/pdf/1612.01016v1.pdf>

<http://sci-hub.cc/10.3847/1538-4357/aa774a>

1 Sept, **залимбовый пересвет** 11:01 $B=57*2/296=0.39$
залимбовый пересвет 22:16 $\leftarrow 16s$ $8s \rightarrow$ $B=43/296=0.15$
22:21 $8s \rightarrow$ $B=32*2/296=0.22$

1 Sept – **восточная сильно залимбовая (E~120) вспышка балла >M5** (оценка по длине пересвета) в ~11 UT дала **протонное событие с медленным возрастанием** в течение 2 суток до J10~0,4 pfu с **очень жестким спектром; крупный CME, Prolonged γ -ray flare**

Estimating the lateral speed of a fast shock driven by a coronal mass ejection at the location of solar radio emissions

S. [Normo](#)^{1,2}, D. E. [Morosan](#)^{1,2}, E. K. J. [Kilpua](#)¹ and J. [Pomoell](#)¹

A&A, 686, A159 (2024)

<https://doi.org/10.1051/0004-6361/202449277>

<https://www.aanda.org/articles/aa/pdf/2024/06/aa49277-24.pdf>

Inter-planetary type-IV solar radio bursts: A comprehensive **catalog** and statistical results

[Atul Mohan](#), [Nat Gopalswamy](#), [Anshu Kumari](#), [Sachiko Akiyama](#), [Sindhuja G](#)

ApJ 2024

<https://arxiv.org/pdf/2406.00194>

Evidence for flare-accelerated particles in large scale loops in the behind-the-limb gamma-ray solar flare of September 29, 2022

Melissa [Pesce-Rollins](#), [Karl-Ludwig Klein](#), [Säm Krucker](#), [Alexander Warmuth](#), [M. Astrid](#)

[Veronig](#), [Nicola Omodei](#), [Christian Monstein](#)

A&A 2024

<https://arxiv.org/pdf/2402.08380.pdf> File

Localization of the Gamma-Ray Emission Region in the 1 September 2014 Behind-the-Limb Solar Flare According to the Fermi/LAT Data.

[Kochanov](#), A.A., [Kiselev](#), V.I., [Grechnev](#), V.V., & [A. M. Uralov](#)

Sol Phys 299, 18 (2024).

<https://doi.org/10.1007/s11207-024-02264-4>

<https://link.springer.com/content/pdf/10.1007/s11207-024-02264-4.pdf>

Transverse Oscillation of Prominence and Filament Induced by an Extreme-ultraviolet Wave from the Far Side of the Sun

Yanjie [Zhang](#)¹, Qingmin Zhang^{1,2}, De-chao Song¹, and Haisheng Ji¹

2024 ApJ 963 140

<https://iopscience.iop.org/article/10.3847/1538-4357/ad206d/pdf>

<https://arxiv.org/pdf/2401.15858.pdf>

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>

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 origin of hard X-ray emissions from the behind-the-limb flare on 2014 September 1

Yihong **Wu**, [Alexis P. Rouillard](#), [Athanasios Kouloumvakos](#), [Rami Vainio](#), [Alexandr N. Afanasiev](#), [Ilya Plotnikov](#), [Ronald J. Murphy](#), [Gottfried J. Mann](#), [Alexander Warmuth](#)

ApJ 2021

<https://arxiv.org/pdf/2101.05401.pdf>

Search for GeV Neutrino Emission During Intense Gamma-Ray Solar Flares with the IceCube Neutrino Observatory

R. **Abbasi**, [M. Ackermann](#), [J. Adams](#), [J. A. Aguilar](#), [M. Ahlers](#),

2021

<https://arxiv.org/pdf/2101.00610.pdf>

Radio Observations of Coronal Mass Ejection Initiation and Development in the Low Solar Corona **Review**

[Eoin P. Carley](#), [Nicole Vilmer](#) and [Angelos Vourlidas](#)

Front. Astron. Space Sci. 7:551558. 2020 File

<https://www.frontiersin.org/articles/10.3389/fspas.2020.551558/full>

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Interplanetary Radio Emission: A Summary of Recent Results **Review**

Nat **Gopalswamy**

Journal of Computational and Interdisciplinary Science 2020

<https://arxiv.org/ftp/arxiv/papers/2008/2008.09222.pdf> File

Positron Processes in the Sun **Review**

Nat **Gopalswamy**

Atoms 2020

<https://arxiv.org/ftp/arxiv/papers/2004/2004.04280.pdf>

Source of Energetic Protons in the 2014 September 1 Sustained Gamma-ray Emission Event

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

Solar Phys. **295**, Article number: 18 **2020** **File**

<https://arxiv.org/ftp/arxiv/papers/2001/2001.03816.pdf>

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CESRA #370 Feb **2020**

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/The Temporal and Spatial Extension of Gamma-ray Emission from the Sun](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/The_Temporal_and_Spatial_Extension_of_Gamma-ray_Emission_from_the_Sun)

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

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First search for GeV neutrinos from bright gamma-ray solar flares using the IceCube Neutrino Observatory

Gwenhaël **de Wasseige** (for the IceCube Collaboration)

the 36th International Cosmic Ray Conference (ICRC 2019). PoS-ICRC2019-1075 **2019**

<https://arxiv.org/pdf/1908.08300.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)

Allafort, A. J.

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

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

Probing the Puzzle of Behind-the-limb γ -Ray Flares: Data-driven Simulations of Magnetic Connectivity and CME-driven Shock Evolution

Meng **Jin**^{1,2}, Vahe Petrosian^{3,4}, Wei Liu^{1,5}, Nariaki V. Nitta¹, Nicola Omodei³, Fatima Rubio da Costa³, Frederic Effenberger^{5,6}, Gang Li⁷, Melissa Pesce-Rollins⁸, Alice Allafort^{3,....}

2018 ApJ 867 122

[sci-hub.tw/10.3847/1538-4357/aae1fd](https://arxiv.org/abs/1808.08300) **File**

The Ground Level Enhancement Event of September 2017 and Other Large Solar Energetic Particle Events of Cycle 24

C. M. S. **Cohen**, **R. A. Mewaldt**

Space Weather **2018**

[sci-hub.tw/10.1029/2018SW002006](https://arxiv.org/abs/1809.02006)

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>

Radio, Hard X-Ray, and Gamma-Ray Emissions Associated with a Far-Side Solar Event

V. **Grechnev**¹ & V. Kiselev¹ & K. Kashapova^{1;2} & A. Kochanov^{1;2} & I. Zimovets^{3;4;5} & A. Uralov¹ & B. Nizamov^{6;7} & I. Grigorieva⁸ & D. Golovin³ & M. Litvak³ & I. Mitrofanov³ & A. Sanin³

Solar Phys. **2018** **File**

<https://arxiv.org/pdf/1808.10103.pdf>

A remarkable, but confused, coronal hard X-ray source

Alexandra **Lysenko**, Larisa Kashapova, Hugh Hudson

RHESSI Science Nuggets #325 June **2018**

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/A_remarkable,_but_confused,_coronal_hard_X-ray_source

Data-driven Simulations of Magnetic Connectivity in Behind-the-Limb γ -ray Flares and Associated Coronal Mass Ejections

Meng **Jin**, [Vahe Petrosian](#), [Wei Liu](#), [Nariaki V. Nitta](#), [Nicola Omodei](#), [Fatima Rubio da Costa](#), [Frederic Effenberger](#), [Gang Li](#), [Melissa Pesce-Rollins](#), [Alice Allafort](#), [Ward Manchester IV](#)

ApJ **2018**

<https://arxiv.org/pdf/1807.01427.pdf>

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>

X-Ray, Radio and SEP Observations of Relativistic Gamma-Ray Events

Review

Karl-Ludwig **Klein**, Kostas Tziotziou, Pietro Zucca, Eino Valtonen, Nicole Vilmer, Olga E. Malandraki, Clarisse Hamadache, Bernd Heber, and Jürgen Kiener

In: O.E. Malandraki, N.B. Crosby (eds.), *Solar Particle Radiation Storms Forecasting and Analysis* Chapter 8, **2018**

<https://link.springer.com/content/pdf/10.1007%2F978-3-319-60051-2.pdf>

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Searching for Extreme SEP Events with STEREO,

Cohen, C. M. S., J. G. Luhmann, R. A. Mewaldt, M. L. Mays, H. M. Bain, Y. Li, and C. O. Lee (**2017**), *Proceedings of 35th ICRC Conference, PoS(ICRC2017)*, id.134, 1–8.

<https://pos.sissa.it/301/134/pdf>

The Relationship between Long-Duration Gamma-Ray Flares and Solar Cosmic Rays

Hugh S. **Hudson**

Space Weather of the Heliosphere: Processes and Forecasts (eds. Claire Foullon and Olga Malandraki), IAU Symposium 335, **2017**

<https://arxiv.org/pdf/1711.05583.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**

Estimation of a Coronal Mass Ejection Magnetic Field Strength using Radio Observations of Gyrosynchrotron Radiation

Eoin P. [Carley](#), [Nicole Vilmer](#), [Paulo J. A. Simões](#), [Brían Ó Fearraigh](#)

A&A 2017

<https://arxiv.org/pdf/1709.05184.pdf>

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>

Time Evolution of Elemental Ratios in Solar Energetic Particle events

P. [Zelina](#), S. Dalla, C. M. S. Cohen, R. A. Mewaldt

ApJ 2016

<https://arxiv.org/pdf/1612.00758v1.pdf>

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>

2 Sept – A central filament eruption, mainly in the northwest quadrant and with extensions into the southwest and northeast quadrant was observed from approximately 16 UT. A partial halo CME

An enormous filament of dark plasma at 304 Å, which had been snaking across the face of the sun for days, became unstable and erupted.

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>

ДВИЖЕНИЯ И КОЛЕБАНИЯ В ВОЛОКНЕ ПЕРЕД ЭРУПЦИЕЙ

МАШНИЧ Г. П.1, **БАШКИРЦЕВ** В. С.

АЖ, Том: 93 Номер: 2 Год: 2016 Страницы: 247

Is flux rope a necessary condition for the progenitor of coronal mass ejections?

Y. [Ouyang](#), K. Yang, P. F. Chen

ApJ 2015

<http://arxiv.org/pdf/1511.01605v1.pdf>

3 Sept – 13:54: центральная (S14W18) M2.5 вспышка, S9~190

Which detectors can I use to analyze this flare?

Brian **Dennis** and Kim Tolbert

RHESSI Science Nuggets, #235, 2014

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Which_detectors_can_I_use_to_analyze_this_flare%3F

5-6 September

Evidence for a Transition Region response to penumbral microjets in sunspots

Gregal J. M. **Visser**s, Luc H. M. Rouppe van der Voort, Mats Carlsson

ApJL 2015

<http://arxiv.org/pdf/1509.01402v1.pdf>

6 Sept - According to NOAA analysts, a CME hit Earth's magnetic field on Sept. 6th at 1525 UT. However, the impact was weak and did not spark geomagnetic storms. **Значительный Forbush.**

A Machine Learning Approach to Correcting Atmospheric Seeing in Solar Flare Observations

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

MNRAS 2020

<https://arxiv.org/pdf/2011.12814.pdf>

The effect of a solar flare on chromospheric oscillations

[David C. L. Millar](#), [Lyndsay Fletcher](#), [Ryan O. Milligan](#)

MNRAS 2020

<https://arxiv.org/pdf/2007.10301.pdf>

IRIS Si IV Line Profiles at Flare Ribbons as Indications of Chromospheric Condensation

[Ke Yu](#), [Y. Li](#), [M. D. Ding](#), [D. Li](#), [Yi-An Zhou](#), [Jie Hong](#)

ApJ 2020

<https://arxiv.org/pdf/2005.02029.pdf>

RADYNVERSION: Learning to Invert a Solar Flare Atmosphere with Invertible Neural Networks

Christopher M. J. **Osborne**, [John A. Armstrong](#), [Lyndsay Fletcher](#)

ApJ 2019

<https://arxiv.org/pdf/1901.08626.pdf>

Non-damping oscillations at flaring loops

[D. Li](#), [D. Yuan](#), [Y. N. Su](#), [Q. M. Zhang](#), [W. Su](#), [Z. J. Ning](#)

A&A 2018

<https://arxiv.org/pdf/1806.03573.pdf>

Decameter Stationary Type IV Burst in Imaging Observations on the 6th of September 2014

Artem **Koval**, Aleksander Stanislavsky, Yao Chen, Shiwei Feng, Aleksander Konovalenko, Yaroslav Volvach

ApJ 2016

<http://arxiv.org/pdf/1606.00990v1.pdf>

Observation of 2011-02-15 X2.2 flare in Hard X-ray and Microwave

Natsuha **Kuroda**, Haimin Wang, Dale E. Gary

ApJ 807 124 2015

<http://arxiv.org/pdf/1506.01424v1.pdf>

Temporal evolution of chromospheric evaporation: case studies of the M1.1 flare on 2014 September 6 and X1.6 flare on 2014 September 10

Hui [Tian](#), Peter R. Young, Katharine K. Reeves, Bin Chen, Wei Liu, Sean McKillop

ApJ 2015

<http://arxiv.org/pdf/1505.02736v1.pdf>

6-15 Sep

Data-driven MHD simulation of a sunspot rotating active region leading to solar eruption

[Chaowei Jiang](#), [Xueshang Feng](#), [Xinkai Bian](#), [Peng Zou](#), [Aiying Duan](#), [Xiaoli Yan](#), [Qiang Hu](#), [Wen He](#), [Xinyi Wang](#), [Pingbing Zuo](#), [Yi Wang](#)

A&A 2023

<https://arxiv.org/pdf/2308.06977.pdf>

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>

7 September

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

Solar science with the Atacama Large Millimeter/submillimeter Array - A revolutionizing new view of our Sun

Review

S. [Wedemeyer](#), [T. Bastian](#), [R. Brajsa](#), [M. Barta](#), [H. Hudson](#), [G. Fleishman](#), [M. Loukitcheva](#), [B. Fleck](#), [E. P. Kontar](#), [B. De Pontieu](#), [S. K. Tiwari](#), [Y. Kato](#), [R. Soler](#), [P. Yagoubov](#), [J. H. Black](#), [P. Antolin](#), [E. Scullion](#), [S. Gun'ar](#), [N. Labrosse](#), [A. O. Benz](#), [H.-G. Ludwig](#), [P. Hauschildt](#), [J. G. Doyle](#), [V. M. Nakariakov](#), [S. K. Solanki](#), [S. M. White](#), [T. Ayres](#), [P. Heinzel](#), [M. Karlicky](#), [T. Van Doorselaere](#), [D. Gary](#), [C. E. Alissandrakis](#), [A. Nindos](#), [L. Rouppe van der Voort](#), [M. Shimojo](#), [T. Zaqarashvili](#), [E. Perez](#)

Space Sci. Rev. 2015

<http://arxiv.org/pdf/1504.06887v2.pdf>

8 September

Data-driven MHD simulation of a sunspot rotating active region leading to solar eruption

[Chaowei Jiang](#), [Xueshang Feng](#), [Xinkai Bian](#), [Peng Zou](#), [Aiying Duan](#), [Xiaoli Yan](#), [Qiang Hu](#), [Wen He](#), [Xinyi Wang](#), [Pingbing Zuo](#), [Yi Wang](#)

A&A 2023

<https://arxiv.org/pdf/2308.06977.pdf>

MHD Modeling of Solar Coronal Magnetic Evolution Driven by Photospheric Flow

[Chaowei Jiang](#)*, [Xinkai Bian](#), [Tingting Sun](#) and [Xueshang Feng](#)

Front. Phys., May 2021 |

<https://doi.org/10.3389/fphy.2021.646750>

Sunspot Rotation as a Driver of Major Solar Eruptions in NOAA Active Region 12158

P. [Vemareddy](#), X. Cheng, B. Ravindra

ApJ 2016

<http://arxiv.org/pdf/1607.03806v1.pdf>

8-10 Sep

Rotation and interaction of the September 8 and 10, 2014 CMEs tested with EUHFORIA
Anwasha [Maharana](#), [Camilla Scolini](#), [Brigitte Schmieder](#), [Stefaan Poedts](#)
A&A **2023**
<https://arxiv.org/pdf/2305.06881.pdf>

MHD Modeling of Solar Coronal Magnetic Evolution Driven by Photospheric Flow
[Chaowei Jiang](#), [Xinkai Bian](#), [Tingting Sun](#), [Xueshang Feng](#)
Frontiers in Physics **2021**
<https://arxiv.org/pdf/2104.07229.pdf>

9 Sept – 00:29: **M4.5/1N LDE вспышка in AR 12158 (N15E28)**; event began at 23:30 UT. a partial halo CME was first visible in LASCO C2 at 00:16 UTC. **Микроволны слабые, протонов нет.**

An application of the weighted horizontal magnetic gradient to solar compact and eruptive events
M. B. [Korsos](#), [Michael S. Ruderman](#), [R. Erdelyi](#)
2017
<https://arxiv.org/pdf/1801.00281.pdf>

9-12 Sept
Distributed Electric Currents in Solar Active Regions
[Yuriy A. Fursyak](#), [Alexander S. Kutsenko](#), [Valentina I. Abramenko](#)
Solar Phys. **2019**
<https://arxiv.org/pdf/1912.07032.pdf>

10 Sept – 17:45: **X1.6/2B LDE вспышка in AR 12158 (N14E02) с мощными микроволнами**, S5~2700, A wave travelled quickly across a large part of the visible solar disk. **Протоны с медленным нарастанием**, the explosion hurled a large and fast **halo CME** directly toward Earth. **Gamma**

Toroidal modified Miller-Turner CME model in EUHFORIA: II. Validation and comparison with flux rope and spheromak
Anwasha [Maharana](#), [Luis Linan](#), [Stefaan Poedts](#), [Jasmina Magdalenic](#)
A&A **2024**
<https://arxiv.org/pdf/2408.03882>

Decay Timescales of Chromospheric Condensations in Solar Flare Footpoints
Elizabeth C. [Butler](#)¹ and Adam F. Kowalski^{2,3}
2024 ApJ 970 33
<https://iopscience.iop.org/article/10.3847/1538-4357/ad3dfb/pdf>

Inferring Fundamental Properties of the Flare Current Sheet Using Flare Ribbons: Oscillations in the Reconnection Flux Rates
[Marcel F. Corchado Albelo](#), [Maria D. Kazachenko](#), [Benjamin J. Lynch](#)
ApJ **2024**
<https://arxiv.org/pdf/2402.03567.pdf>

Characterising Solar Magnetic Reconnection in Confined and Eruptive Flares
[Kanniah Balamuralikrishna](#), [John Y. H. Soo](#), [Norhaslinda Mohamed Tahrin](#), [Abdul Halim Abdul Aziz](#)
Astrophys. Space Sci. 368 (2023) 94
<https://arxiv.org/ftp/arxiv/papers/2312/2312.12873.pdf>
<https://doi.org/10.1007/s10509-023-04251-w>

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>

Magnetic Field Extrapolation in Active Region Well Comparable to Observations in Multiple Layers

Fu [Yu](#)^{1,2,3}, [Jie Zhao](#)^{1,3}, [Yang Su](#)^{1,2}, [Xiaoshuai Zhu](#)³, [Yang Guo](#)⁴, [Jinhua Shen](#)⁵, and [Hui Li](#)^{1,2}

2023 ApJ 951 54

<https://iopscience.iop.org/article/10.3847/1538-4357/acd112/pdf>

Rotation and interaction of the September 8 and 10, 2014 CMEs tested with EUHFORIA

Anwasha [Maharana](#), [Camilla Scolini](#), [Brigitte Schmieder](#), [Stefaan Poedts](#)

A&A 2023

<https://arxiv.org/pdf/2305.06881.pdf>

Complete replacement of magnetic flux in a flux rope during a coronal mass ejection

[Tingyu Gou](#), [Rui Liu](#), [Astrid M. Veronig](#), [Bin Zhuang](#), [Ting Li](#), [Wensi Wang](#), [Mengjiao Xu](#), [Yuming Wang](#)

2023

<https://arxiv.org/pdf/2305.03217.pdf>

The Transition Region of Solar Flare Loops

[C. Gontikakis](#), [S. K. Antiochos](#), [P. R. Young](#)

ApJ 2023

<https://arxiv.org/pdf/2301.11020.pdf>

Interrogating Solar Flare Loop Models with IRIS Observations 1: Overview of the Models, and Mass flows **Review**

[Graham S. Kerr](#)

Frontiers in Astronomy and Space Sciences 2022

<https://arxiv.org/pdf/2212.06647.pdf>

Solar Flare Ribbon Fronts I: Constraining flare energy deposition with IRIS spectroscopy

[Vanessa Polito](#), [Graham S. Kerr](#), [Yan Xu](#), [Viacheslav M. Sadykov](#), [Juraj Lorincik](#)

<https://arxiv.org/pdf/2211.05333.pdf>

ApJ 2022

<https://arxiv.org/pdf/2211.05333.pdf>

Does the non-force-freeness matter for the extrapolation of solar magnetic field?

[Fu Yu](#), [Jie Zhao](#), [Yang Su](#), [Xiaoshuai Zhu](#), [Yang Guo](#)

ApJ 2022

<https://arxiv.org/pdf/2210.15074.pdf>

Invited **Review**: Short-term Variability with the Observations from the Helioseismic and Magnetic Imager (HMI) Onboard the Solar Dynamics Observatory (SDO): Insights into Flare Magnetism

[Maria D. Kazachenko](#), [Marcel F. Albelo-Corchado](#), [Cole A. Tamburri](#) & [Brian T. Welsch](#)

Solar Physics volume 297, Article number: 59 (2022)

<https://link.springer.com/content/pdf/10.1007/s11207-022-01987-6.pdf> File

Quantitative Characterization of Magnetic Flux Rope Properties for Two Solar Eruption Events

[Wen He](#), [Qiang Hu](#), [Chaowei Jiang](#), [Jiong Qiu](#), [Avijeet Prasad](#)

ApJ 2022

<https://arxiv.org/pdf/2201.03149.pdf>

Is Flare Ribbon Fine Structure Related to Tearing in the Flare Current Sheet?

P. F. **Wyper**¹ and D. I. Pontin^{2,3}

2021 ApJ 920 102

<https://iopscience.iop.org/article/10.3847/1538-4357/ac1943/pdf>

<https://doi.org/10.3847/1538-4357/ac1943>

<https://arxiv.org/pdf/2108.10966.pdf>

Exploring mutual information between IRIS spectral lines. II. Calculating the most probable response in all spectral windows

[Brandon Panos](#), [Lucia Kleint](#)

2021

<https://arxiv.org/pdf/2106.03463.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>

Magnetically coupled atmosphere, fast sausage MHD waves, and forced magnetic field reconnection during the SOL2014-09-10T17:45 flare

[Hana Meszarosova](#), [Peter Gomory](#)

A&A 2020

<https://arxiv.org/pdf/2010.01527.pdf>

The high helium abundance and charge states of the interplanetary CME and its material source on the Sun

[Hui Fu](#), [R.A. Harrison](#), [J.A. Davies](#), [LiDong Xia](#), [XiaoShuai Zhu](#), [Bo Li](#), [ZhengHua Huang](#), [D. Barnes](#)

ApJL 2020

<https://arxiv.org/pdf/2008.08816.pdf>

Solar Flare Arcade Modelling: Bridging the gap from 1D to 3D Simulations of Optically Thin Radiation

[Graham S. Kerr](#), [Joel C. Allred](#), [Vanessa Polito](#)

ApJ 2020

<https://arxiv.org/pdf/2007.13856.pdf>

Observation of Differential Rotation Within a Sunspot Umbra During an X-Class Flare

[Richard Grimes](#), [Balázs Pintér](#) & [Huw Morgan](#)

Solar Physics volume 295, Article number: 87 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01657-5.pdf>

IRIS Si IV Line Profiles at Flare Ribbons as Indications of Chromospheric Condensation

[Ke Yu](#), [Y. Li](#), [M. D. Ding](#), [D. Li](#), [Yi-An Zhou](#), [Jie Hong](#)

ApJ 2020

<https://arxiv.org/pdf/2005.02029.pdf>

Electric current evolution at the footpoints of solar eruptions

Krzysztof [Barczynski](#), [Guillaume Aulanier](#), [Miho Janvier](#), [Brigitte Schmieder](#), [Sophie Masson](#)

ApJ 2020

<https://arxiv.org/pdf/2004.07990.pdf>

Spectral signatures of chromospheric condensation in a major solar flare

David R. [Graham](#), [Gianna Cauzzi](#), [Luca Zangrilli](#), [Adam Kowalski](#), [Paulo Simões](#), [Joel Allred](#)

ApJ 2020

<https://arxiv.org/pdf/2004.05075.pdf>

Characteristics of SEPs during Solar Cycle 21-24

Raj **Kumar**, [Ramesh Chandra](#), [Bimal Pande](#), [Seema Pande](#)
Journal of Astrophysics and Astronomy **2020**
<https://arxiv.org/ftp/arxiv/papers/2002/2002.12708.pdf>

Prediction of Flares within 10 Days before They Occur on the Sun

Nasibe **Alipour**, Faranak Mohammadi, and Hossein Safari
2019 ApJS 243 20
sci-hub.se/10.3847/1538-4365/ab289b

Can the Superposition of Evaporative Flows Explain Broad Fe xxi Profiles during Solar Flares?

Vanessa **Polito**¹, Paola Testa¹, and Bart De Pontieu^{2,3}
2019 ApJL 879 L17
sci-hub.se/10.3847/2041-8213/ab290b

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

Solar Active Region Electric Currents Before and During Eruptive Flares **Review**

Brigitte **Schmieder**, [Guillaume Aulanier](#)
AGU book , A&A **2019**
<https://arxiv.org/pdf/1903.04050.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

Drifting of the line-tied footpoints of CME flux-ropes

Guillaume **Aulanier**, [Jaroslav Dudik](#)
A&A **2018**
<https://arxiv.org/pdf/1811.04253.pdf>

Magnetic Field Modeling of hot channels in Four Flare/CME Events

Tie **Liu**, [Yingna Su](#), [Xin Cheng](#), [Adriaan van Ballegooijen](#), [Haisheng Ji](#)
ApJ **2018**
<https://arxiv.org/pdf/1810.03795.pdf>

Diagnostics of Solar Flares by Analyzing the Spectral Lines Emission of Highly Ionized Irons I. M. **Podgorny** ¹ , A. I. Podgorny

Proceedings of Ninth Workshop “Solar Influences on the Magnetosphere, Ionosphere and Atmosphere”
Sunny Beach, Bulgaria, May 30 - June 3, **2017**, p. 01-07
http://ws-sozopol.stil.bas.bg/2017Sunny/Proceedings2017_V3.pdf

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David **Webb**, Nariaki Nitta
[Solar Physics](#) October **2017**, 292:142 File

Are complex magnetic field structures responsible for the confined X-class flares in super active region 12192?

Jun **Zhang**, Ting Li, Huadong Chen

ApJ **2017**

<https://arxiv.org/pdf/1707.03171.pdf>

Quasi-periodic pulsations with multiple periods in hard X-ray emission

Dong **Li**, Qingmin Zhang

MNRAS **2017**

<https://arxiv.org/pdf/1706.01680.pdf>

Comparison of Two Coronal Magnetic Field Models for Reconstructing a Sigmoidal Solar Active Region With Coronal Loops

Aiyong **Duan**, Chaowei Jiang, Qiang Hu, [Huai Zhang](#), [G. Allen Gary](#), [S. T. Wu](#), [Jinbin Cao](#)

ApJ **2017**

<https://arxiv.org/pdf/1706.00595.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>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth: 2. Geomagnetic response

N. P. **Savani**, A. Vourlidas, I. G. Richardson, A. Szabo, B. J. Thompson, A. Pulkkinen, M. L. Mays, T. Nieves-Chinchilla, V. Bothmer

Space Weather Volume 15, Issue 2 February **2017** Pages 441–461 DOI: 10.1002/2016SW001458

<http://onlinelibrary.wiley.com/doi/10.1002/2016SW001458/full>

<http://sci-hub.cc/10.1002/2016SW001458>

Predicting the Magnetic Field of Earth-impacting CMEs

C. **Kay**¹, N. Gopalswamy¹, A. Reinard², and M. Opher³

2017 ApJ 835 117

<http://sci-hub.cc/doi/10.3847/1538-4357/835/2/117>

Plasma Motions and Turbulent Magnetic Diffusivity of Active Region AR 12158 Using a Minimum Energy Functional and Non-Force-Free Reconstructions of Vector Magnetograms

Benoit **Tremblay**, Alain Vincent

Solar Phys. January **2017**, 292:2

Pre-flare coronal dimmings

Q. M. **Zhang**, Y. N. Su, H. S. Ji

A&A **2016**

<https://arxiv.org/pdf/1611.08371v1.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>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth:

2. Geomagnetic response: BZ VALIDATION

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

Space Weather 2016

Solar X-ray Emission Measured by the Vernov Mission During September – October of 2014

N. **Myagkova**, A. V. Bogomolov, L. K. Kashapova, [V. V. Bogomolov](#), [S. I. Svertilov](#), [M. I. Panasyuk](#), [E. A. Kuznetsova](#), [G. V. Rozhkov](#)
Solar Phys. 2016

Sunspot Rotation as a Driver of Major Solar Eruptions in NOAA Active Region 12158

P. **Vemareddy**, X. Cheng, B. Ravindra
ApJ 2016
<http://arxiv.org/pdf/1607.03806v1.pdf>

The First Focused Hard X-ray Images of the Sun with NuSTAR

Brian W. **Grefenstette**, Lindsay Glesener, Sönja Krucker, Hugh Hudson, Iain G. Hannah, David M. Smith, Julia K. Vogel, Stephen M. White, Kristin K. Madsen, Andrew J. Marsh, Amir Caspi, Bin Chen, Albert Shih, Matej Kuhar, Steven E. Boggs, Finn E. Christensen, William W. Craig, Karl Forster, Charles J. Hailey, Fiona A. Harrison, Hiromasa Miyasaka, Daniel Stern, William W. Zhang
ApJ 2016
<http://arxiv.org/pdf/1605.09738v1.pdf>

OBSERVATIONS OF MAGNETIC FLUX-ROPE OSCILLATION DURING THE PRECURSOR PHASE OF A SOLAR ERUPTION

G. P. **Zhou**^{1,2,4}, J. Zhang³, and J. X. Wang
2016 ApJ 823 L19

On the Characteristics of Footpoints of Solar Magnetic Flux Ropes during the Eruption

X. **Cheng**, M. D. Ding
ApJ Supplement Series 2016
<http://arxiv.org/pdf/1605.04047v1.pdf>

Spectroscopic Diagnostics of Solar Magnetic Flux Ropes Using Iron Forbidden Line

X. **Cheng**, M. D. Ding
ApJL 2016
<http://arxiv.org/pdf/1605.00195v1.pdf>

Hooked flare ribbons and flux-rope related QSL footprints

Jie **Zhao**, Stuart A. Gilchrist, Guillaume Aulanier, Brigitte Schmieder, Etienne Pariat, Hui Li
ApJ 2014
<http://arxiv.org/pdf/1603.07563v1.pdf>

Slipping Magnetic Reconnection, Chromospheric Evaporation, Implosion, and Precursors in the 2014 September 10 X1.6-Class Solar Flare

Jaroslav **Dudik**, Vanessa Polito, Miho Janvier, Sargam M. Mulay, Marian Karlicky, Guillaume Aulanier, Giulio Del Zanna, Elena Dzifcakova, Helen E. Mason, Brigitte Schmieder
ApJ 2016
<http://arxiv.org/pdf/1603.06092v1.pdf> File

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>

Observations of multiple blobs in homologous solar coronal jets in closed loops

Q. M. **Zhang**, H. S. Ji, Y. N. Su
Solar Phys. **2016**
<http://arxiv.org/pdf/1601.04390v1.pdf>

Observational Evidences of Electron-driven Evaporation in two Solar Flares

Dong **Li**, Zongjun Ning, Qingmin Zhang
ApJ **2015**
<http://arxiv.org/pdf/1509.07226v1.pdf>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

1. Initial architecture

Savani, N. P.; Vourlidas, A.; Szabo, A.; Mays, M. L.; Thompson, B. J.; Richardson, I. G.; Evans, R.; Pulkkinen, A.; Nieves-Chinchilla, T.
Space Weather, Volume 13, Issue 6 June **2015** Pages 374–385,
<http://arxiv.org/pdf/1502.02067v1.pdf> **File**
<http://onlinelibrary.wiley.com/doi/10.1002/2015SW001171/full>

Solar ALMA: Observation-Based Simulations of the mm and sub-mm Emissions from Active Regions

Gregory **Fleishman**, Maria Loukitcheva, Gelu Nita
presentation at the Tokyo ALMA meeting at Dec., 2014, **2015**
<http://arxiv.org/pdf/1506.08395v1.pdf>

Temporal evolution of multiple evaporating ribbon sources in a solar flare

D. R. **Graham**, G. Cauzzi
ApJL **2015**
<http://arxiv.org/pdf/1506.03465v1.pdf>

Imaging and Spectral Observations of Quasi-Periodic Pulsations in a Solar Flare

D. **Li**, Z. J. Ning, Q. M. Zhang
ApJ **2015**
<http://arxiv.org/pdf/1505.03252v1.pdf>

Temporal evolution of chromospheric evaporation: case studies of the M1.1 flare on 2014 September 6 and X1.6 flare on 2014 September 10

Hui **Tian**, Peter R. Young, Katharine K. Reeves, Bin Chen, Wei Liu, Sean McKillop
ApJ **2015**
<http://arxiv.org/pdf/1505.02736v1.pdf>

Quasi-periodic Slipping Magnetic Reconnection During an X-class Solar Flare Observed by the Solar Dynamics Observatory and Interface Region Imaging Spectrograph

Ting **Li**, Jun Zhang
ApJL **2015**
<http://arxiv.org/pdf/1504.01111v1.pdf>

Imaging and Spectroscopic Diagnostics on the Formation of Two Magnetic Flux Ropes Revealed by SDO/AIA and IRIS

X. **Cheng**, M. D. Ding, C. Fang
ApJ **2015**
<http://arxiv.org/pdf/1502.07801v1.pdf>

10-13 Sept

Toroidal modified Miller-Turner CME model in EUHFORIA: II. Validation and comparison with flux rope and spheromak

Anwasha [Maharana](#), [Luis Linan](#), [Stefaan Poedts](#), [Jasmina Magdalenic](#)

A&A 2024

<https://arxiv.org/pdf/2408.03882>

High-energy (>40 MeV) Proton Intensity Enhancements Associated with the Passage of Interplanetary Shocks at 1 au

D. [Lario](#)¹, I. G. Richardson^{1,2}, A. Aran³, and N. Wijsen^{1,2}

2023 ApJ 950 89

<https://iopscience.iop.org/article/10.3847/1538-4357/acc9c5/pdf> File

Rotation and interaction of the September 8 and 10, 2014 CMEs tested with EUHFORIA

Anwasha [Maharana](#), [Camilla Scolini](#), [Brigitte Schmieder](#), [Stefaan Poedts](#)

A&A 2023

<https://arxiv.org/pdf/2305.06881.pdf>

Complete replacement of magnetic flux in a flux rope during a coronal mass ejection

[Tingyu Gou](#), [Rui Liu](#), [Astrid M. Veronig](#), [Bin Zhuang](#), [Ting Li](#), [Wensi Wang](#), [Mengjiao Xu](#), [Yuming Wang](#)

2023

<https://arxiv.org/pdf/2305.03217.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

11 Sept - The first of two CMEs expected to hit Earth's magnetic field has arrived at 23 UT.

Or 9-oro.

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

Rotation and interaction of the September 8 and 10, 2014 CMEs tested with EUHFORIA

Anwasha [Maharana](#), [Camilla Scolini](#), [Brigitte Schmieder](#), [Stefaan Poedts](#)

A&A 2023

<https://arxiv.org/pdf/2305.06881.pdf>

A nonlinear solar magnetic field calibration method for the filter-based magnetograph by the residual network

Jingjing [Guo](#), [Xianyong Bai](#), [Yuanyong Deng](#), [Hui Liu](#), [Jiabao Lin](#), [Jiangtao Su](#), [Xiao Yang](#), [Kaifan Ji](#)

ApJ 2020

<https://arxiv.org/pdf/2012.07286.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>

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>

Hard X-Ray Emission from Partially Occulted Solar Flares: RHESSI Observations in Two Solar Cycles

Frederic **Effenberger**, Fatima Rubio da Costa, Mitsuo Oka, Pascal Saint Hilaire, Wei Liu, Vahé Petrosian, Lindsay Glesener, Säm Krucker
ApJ **2016**
<https://arxiv.org/pdf/1612.02856v1.pdf>

11-14 Sept

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>

Predicting the magnetic vectors within coronal mass ejections arriving at Earth

Savani, N. P.; Vourlidas, A.; Szabo, A.; Mays, M. L.; Thompson, B. J.; Richardson, I. G.; Evans, R.; Pulkkinen, A.; Nieves-Chinchilla, T.
Space Weather Journal , Jan **2015**, **File**
<http://arxiv.org/pdf/1502.02067v1.pdf>

12 Sept - The geomagnetic field was quiet to major storm on September 12 (**Dst~-91, Kp=7**). Solar wind speed at SOHO ranged between 373 and 728 km/s. A strong solar wind shock with solar wind speed increasing abruptly from 404 to 655 km/sec was observed at SOHO at 15:26 UTC, the arrival of the September 10 CME. The interplanetary magnetic field was at times strongly southwards after the CME arrival, after 23h UTC the IMF has been strongly northwards. **Значительный форбуш.**

12 Sept - A filament eruption started near the central meridian at 17:58 UTC. A near simultaneous event occurred on the solar backside and was the most likely source of a CME that was visible from 18:36 UTC in LASCO imagery over the north pole and the northern limbs.
~18 UT: STEREO-B, значительная эрупция северо-центрального потустороннего волокна

Complete replacement of magnetic flux in a flux rope during a coronal mass ejection

Tingyu Gou, **Rui Liu**, **Astrid M. Veronig**, **Bin Zhuang**, **Ting Li**, **Wensi Wang**, **Mengjiao Xu**, **Yuming Wang**
2023
<https://arxiv.org/pdf/2305.03217.pdf>

Small-scale flux ropes in ICME sheaths

J. **Ruohotie**, **E. K. J. Kilpua**, **S. W. Good**, **M. Ala-Lahti**
Frontiers in Astronomy and Space Sciences **2022**
<https://arxiv.org/pdf/2208.07662.pdf>

Особенности спорадических вариаций плотности и анизотропии галактических космических лучей в 24-м цикле солнечной активности.

Григорьев В. Г., Герасимова С. К., Гололобов П. Ю., Стародубцев С. А., Зверев А. С.

Estimating the Magnetic Structure of an Erupting CME Flux Rope From AR12158 Using Data-Driven Modeling

[Emilia K. J. Kilpua](#)^{*}, Jens Pomoell, [Daniel Price](#), [Ranadeep Sarkar](#) and [Eleanna Asvestari](#)

Front. Astron. Space Sci., March 2021 |

<https://www.frontiersin.org/articles/10.3389/fspas.2021.631582/full>

<https://doi.org/10.3389/fspas.2021.631582>

Statistical Analysis of Magnetic Field Fluctuations in Coronal Mass Ejection-Driven Sheath Regions

E. K. J. [Kilpua](#)^{1*}, S. W. Good¹, M. Ala-Lahti¹, A. Osmane¹, D. Fontaine², L. Hadid², M. Janvier³ and E. Yordanova⁴

Front. Astron. Space Sci., 04 February 2021 |

<https://doi.org/10.3389/fspas.2020.610278>

The Efficiency of Coronal Mass Ejection With Different IMF Preconditions on the Production of Megaelectronvolt Electron Content in the Outer Radiation Belt

C.-J. [Yuan](#) [Q.-G. Zong](#)

JGR [Volume 124, Issue 5](#) May 2019 Pages 3222-3235

[sci-hub.se/10.1029/2018JA026263](https://doi.org/10.1029/2018JA026263)

Rigidity dependence of Forbush decreases in the energy region exceeding the sensitivity of neutron monitors

M. [Savić](#) [N. Veselinović](#) [A. Dragić](#) [D. Maletić](#) [D. Joković](#) [R. Banjanac](#) [V. Udovičić](#)

[Advances in Space Research](#) [Volume 63, Issue 4](#), 15 February 2019, Pages 1483-1489

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>

A “Space Weather Buoy” Operated by Citizen Scientists

[Phillips](#), T., et al.

(2016), Space Weather Ballooning, Space Weather, 14, 697–703

<http://onlinelibrary.wiley.com/doi/10.1002/swq.12/pdf>

12-14 Sep

Turbulence, intermittency and cross-scale energy transfer in an interplanetary coronal mass ejection

Roque Márquez [Rodríguez](#), [Luca Sorriso-Valvo](#), [Emiliya Yordanova](#)

Solar Phys. 2022

<https://arxiv.org/pdf/2212.06871.pdf>

Solar Energetic Particle Events and Forbush Decreases Driven by the Same Solar Sources

[Belov](#), Anatoly ; [Shlyk](#), Nataly ; [Abunina](#), Maria ; [Belova](#), Elena ; [Abunin](#), Artem ; [Papaioannou](#), Athanasios

Universe 2022, 8(8), 403;

<https://doi.org/10.3390/universe8080403>

<https://www.mdpi.com/2218-1997/8/8/403/pdf>

13 Sept

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>

14 Sept – 02:16: M1.5 вспышка, S13W49

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

Solar Event Simulations using the HAWC Scaler System

O. [Enriquez-Rivera](#), A. Lara, R. Caballero-Lopez, for the HAWC Collaboration
the 34th International Cosmic Ray Conference (ICRC2015), The Hague, The Netherlands.

<http://arxiv.org/pdf/1508.07285v1.pdf>

14-15 Sep

Estimating the Magnetic Structure of an Erupting CME Flux Rope From AR12158 Using Data-Driven Modeling

[Emilia K. J. Kilpua](#)*, Jens Pomoell, [Daniel Price](#), [Ranadeep Sarkar](#) and [Eleanna Asvestari](#)

Front. Astron. Space Sci., March 2021 |

<https://www.frontiersin.org/articles/10.3389/fspas.2021.631582/full>

<https://doi.org/10.3389/fspas.2021.631582>

17 Sept

Statistics of Solar White-Light Flares I: Optimization of Identification Methods and Application

[Yingjie Cai](#), [Yijun Hou](#), [Ting Li](#), [Jifeng Liu](#)

ApJ 2024

<https://arxiv.org/pdf/2408.05381>

From Chromospheric Evaporation to Coronal Rain: An Investigation of the Mass and Energy Cycle of a Flare

[Seray Sahin](#), [Patrick Antolin](#)

ApJ 2024

<https://arxiv.org/pdf/2406.02280>

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 Low-Frequency Solar Corona in Circular Polarization

Patrick I. [McCauley](#), [Iver H. Cairns](#), [Stephen M. White](#), [Surajit Mondal](#), [Emil Lenc](#), [John Morgan](#), [Divya Oberoi](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1907.10878.pdf>

17-18 Sept

IRIS observations short-term variability in moss associated with transient hot coronal loops

Paola [Testa](#), [Vanessa Polito](#), [Bart De Pontieu](#)

ApJ 2019

<https://arxiv.org/pdf/1910.08201.pdf>

18 Sep

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>

19 Sept - No geomagnetic storm was in the forecast for Sept. 19th, but a storm occurred anyway. Dst~ -37 nT. The disturbance that began during the evening of September 18 was likely associated with a co-rotating interaction region caused by a large southern hemisphere coronal hole. An extension of that coronal hole rotated across the central meridian on September 15 and was the most likely source of the disturbance

Transverse oscillations in a coronal loop triggered by a jet

S. [Sarkar](#), V. Pant, A. K. Srivastava, D. Banerjee

Solar Phys. 2016

<https://arxiv.org/pdf/1611.04063v1.pdf>

21 Sep

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>

22 Sept – Небольшое протонное возрастание. Видимо, от эрупции в ~06:30 на невидимой стороне.

CME. См. STEREO-B.

The “SEP Clock”: A Discussion of First Proton Arrival Times in Wide-Spread Solar Energetic Particle Events.

[Posner](#), A., [Richardson](#), I.G. & [Strauss](#), R.DT.

Sol Phys 299, 126 (2024).

<https://doi.org/10.1007/s11207-024-02350-7>

<https://link.springer.com/content/pdf/10.1007/s11207-024-02350-7.pdf>

22-30 Sept

Properties of quasi-periodic pulsations in solar flares from a single active region

C. E. [Pugh](#), [V. M. Nakariakov](#), [A.-M. Broomhall](#), [A. V. Bogomolov](#), [I. N. Myagkova](#)

A&A 2017

<https://arxiv.org/pdf/1709.09472.pdf>

23 Sept - Big east (S11E32) sunspot AR2172 erupted on Sept. 23rd at 2316 UT, producing an impulsive M2-class solar flare. S5~590, II, IV, CME

24 Sept - A large back-sided northern hemisphere CME was observed late (~20 UT) on September 24, this CME was associated with a minor enhancement in proton levels.

~20:30: STEREO-B, NE эрупция с мощной корональной волной

Precise timing of solar flare footpoint sources from mid-infrared observations

[Paulo J. A. Simões](#), [Lyndsay Fletcher](#), [Hugh S. Hudson](#), [Graham S. Kerr](#), [Matt Penn](#), [Karla F. Lopez](#)

MNRAS 2024

<https://arxiv.org/pdf/2406.11361>

RHESSI Science Nuggets #457 2023

https://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Precise_timing_of_flare_footpoint_sources_from_mid-infrared_observations

Spicules in IRIS Mg II Observations: Automated Identification

[Vicki L. Herde](#), [Phillip C. Chamberlin](#), [Don Schmit](#), [Souvik Bose](#), [Adrian Daw](#), [Ryan O.](#)

[Milligan](#), [Vanessa Polito](#)

AAS Journal 2022

<https://arxiv.org/pdf/2212.04990.pdf>

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

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

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

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

Automatic Near-Real-Time Detection of CMEs in Mauna Loa K-Cor Coronagraph Images

W. T. [Thompson](#), O. C. St. Cyr, J. T. Burkepile, A. Posner

Space Weather Volume 15, Issue 10 October 2017 Pages 1288–1299

<http://sci-hub.cc/10.1002/2017SW001694>

Formation of the thermal infrared continuum in solar flares

Paulo J. A. [Simões](#)¹, [Graham S. Kerr](#)^{1*}, [Lyndsay Fletcher](#)¹, [Hugh S. Hudson](#)^{1,2}, [C. Guillermo Giménez de Castro](#)³ and [Matt Penn](#)

A&A 605, A125 (2017)

<https://www.aanda.org/articles/aa/pdf/2017/09/aa30856-17.pdf>

Spectral and Imaging Observations of a White-light Flare in the Mid-Infrared

[M Penn](#), [S Krucker](#), [H Hudson](#), [M Jhabvala](#), [D Jennings](#), [A Lunsford](#), [P Kaufmann](#)

2015

<http://arxiv.org/pdf/1512.04449v1.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

Forecasting Space Weather Events for a Neighboring World

Yihua [Zheng](#)^{*}, [Tom Mason](#) and [Erin L. Wood](#)

Space Weather Volume 13, Issue 1, pages 2–4, January 2015

<http://www.readcube.com/articles/10.1002%2F2014SW001140>

25 Sep

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>

26 September 05:44 хороший LDE C8.6 N16W13

27 Sept

Oscillatory Response of the Solar Chromosphere to a Strong Downflow above a Sunspot

Hannah **Kwak**, Jongchul Chae, Donguk Song, Yeon-Han Kim, Eun-Kyung Lim, Maria S. Madjarska
ApJ Letters 2016

<http://arxiv.org/pdf/1604.02252v1.pdf>

28 Sept – 02:58 UT, the magnetic canopy of sunspot AR2173 erupted, producing an **M5.1/2B flare**.

Space Weather Research using Spectropolarimetric Radio Imaging Combined With Aditya-L1 and PUNCH Missions

[Devojyoti Kansabanik](#), [Surajit Mondal](#), [Divya Oberoi](#), [Puja Majee](#)

Conference proceedings, The 21st Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, Edited by A. S. Brun, J. Bouvier, P. Petit 2023

<https://arxiv.org/pdf/2301.13673.pdf>

Imaging-spectroscopy of a band-split type II solar radio burst with the Murchison Widefield Array

[Shilpi Bhunia](#), [Eoin P. Carley](#), [Divya Oberoi](#), [Peter T. Gallagher](#)

A&A 2022

<https://arxiv.org/pdf/2212.07698.pdf>

A novel algorithm for high fidelity spectro-polarimetric snapshot imaging of the low-frequency radio Sun using SKA-low precursor

[Devojyoti Kansabanik](#), [Divya Oberoi](#), [Surajit Mondal](#)

2022 3rd URSI Atlantic and Asia Pacific Radio Science Meeting (AT-AP-RASC)

<https://arxiv.org/pdf/2207.11924.pdf>

Tackling the Unique Challenges of Low-Frequency Solar-Polarimetry with SKA-Low Precursor : The Algorithm

[Devojyoti Kansabanik](#), [Divya Oberoi](#), [Surajit Mondal](#)

ApJ 2022

<https://arxiv.org/pdf/2204.04578.pdf>

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

[Jiong Qiu](#)

ApJ 2021

<https://arxiv.org/pdf/2101.11069.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>

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>

29 Sept

Density distribution of photospheric vertical electric currents in flare active regions of the Sun

I.V. [Zimovets](#) (1), [A.B. Nechaeva](#) (1 and 2), [I.N. Sharykin](#) (1), [W.Q. Gan](#) (3)

2019

<https://arxiv.org/pdf/1908.09016.pdf>

30 September

Bridging the Gap: Capturing the Ly α Counterpart of a Type-II Spicule and its Heating Evolution with VAULT2.0 and IRIS Observations

Georgios [Chintzoglou](#), [Bart De Pontieu](#), [Juan Martínez-Sykora](#), [Tiago M.D. Pereira](#), [Angelos Vourlidas](#), [Samuel Tun Beltran](#)

ApJ 2018

<https://arxiv.org/pdf/1803.03405.pdf>

Magnetic Flux Rope Shredding by a Hyperbolic Flux Tube: The Detrimental Effects of Magnetic Topology on Solar Eruptions

Georgios [Chintzoglou](#), [Angelos Vourlidas](#), [Antonia Savcheva](#), [Svetlin Tassev](#), [Samuel Tun Beltran](#), [Guillermo Stenborg](#)

ApJ 2017

<https://arxiv.org/pdf/1706.00057.pdf>

Oct 2014

Large Sunspot Groups and Great Magnetic Storms: Magnetic Suppression of CMEs

Edward W. [Cliver](#)¹, [Werner Pötzi](#)², and [Astrid M. Veronig](#)^{2,3}

2022 ApJ 938 136

<https://iopscience.iop.org/article/10.3847/1538-4357/ac847d/pdf>

Oct-Nov

Remeasurement of Solar Observing Optical Network sunspot areas

P J [Meadows](#)

Monthly Notices of the Royal Astronomical Society, Volume 497, Issue 1, September 2020, Pages 1110–1114,

<https://doi.org/10.1093/mnras/staa2007>

1 Oct

The unipolar solar flares as a manifestation of the 'topological' magnetic reconnection

[Yurii V. Dumin](#), [Boris V. Somov](#)

MNRAS 2023

<https://arxiv.org/pdf/2309.16417.pdf>

Observation of "Topological" Microflares in the Solar Atmosphere

[Yurii V. Dumin](#), [Boris V. Somov](#)

Research Notes of the American Astronomical Society 2017

<https://arxiv.org/pdf/1711.03140.pdf>

2 Oct – 19:01:5 M1.5 + M7.3 LDE вспышка, S17W82 , без микроволн и протонов, П/IV, крупный CME

Ground-based Solar Observations for Space Weather Forecasting

[A.G. Tlatov](#), [A.A. Pevtsov](#)

2023

<https://arxiv.org/ftp/arxiv/papers/2303/2303.01708.pdf>

White-light QFP wave train and the associated failed breakout eruption*

Yuandeng [Shen](#)^{1,2,3,5}, [Surui Yao](#)¹, [Zehao Tang](#)^{1,3}, [Xinping Zhou](#)^{1,3}, [Zhining Qu](#)⁴, [Yadan Duan](#)^{1,3}, [Chengrui Zhou](#)^{1,3} and [Song Tan](#)^{1,3}

A&A 665, A51 (2022)

<https://arxiv.org/pdf/2207.08110.pdf>

<https://www.aanda.org/articles/aa/pdf/2022/09/aa43924-22.pdf>

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

[Zhichen Jing](#), [Wuqi Pan](#), [Yukun Yang](#), [Dechao Song](#), [Jun Tian](#), [Y. Li](#), [X. Cheng](#), [Jie Hong](#), [M. D. Ding](#)

ApJ 2020

<https://arxiv.org/pdf/2009.10358.pdf>

3 Oct

Preliminary Discussion on the Current Sheet

Tao [Ding](#)¹, Jun Zhang¹, Yuan Fang¹, and Zhiying Ma¹

2024 ApJ 964 58

<https://iopscience.iop.org/article/10.3847/1538-4357/ad2683/pdf>

Observing the release of twist by magnetic reconnection in a solar filament eruption

Zhike [Xue](#), Xiaoli Yan, Xin Cheng, Liheng Yang, Yingna Su, Bernhard Kliem, Jun Zhang, Zhong Liu, Yi Bi, Yongyuan Xiang, Kai Yang & Li Zhao

Nature Communications 2016 File

<http://www.nature.com/ncomms/2016/160616/ncomms11837/pdf/ncomms11837.pdf>

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>

4 Oct

C-1.4 Class Flare and An Associated Peculiar Coronal Jet

[Ritika Solanki](#), [A.K. Srivastava](#), [B.N. Dwivedi](#)

Proceedings IAU Symposium No. 340 2018

<https://arxiv.org/pdf/1805.05948.pdf>

9 Oct

Multi-thermal jet formation triggered by flux emergence

[Xiaohong Li](#), [Rony Keppens](#), [Yuhao Zhou](#)

ApJL 2023

<https://arxiv.org/pdf/2304.01043.pdf>

10 Oct - 16:47, C3.0 LDE, SW quadrant, filament eruption, CME

11-15 Oct

Investigation of the Middle Corona with SWAP and a Data-Driven Non-Potential Coronal Magnetic Field Model

[Karen A. Meyer](#), [Duncan H. Mackay](#), [Dana-Camelia Talpeanu](#), [Lisa A. Upton](#) & [Matthew J. West](#)

Solar Physics volume 295, Article number: 101 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01668-2.pdf>

14 Oct - 18:37 M1.1 импульс и сразу за ним медленное LDE M2.2 с пиком в 21:21 и крупный CME (сильное отклонение корональных лучей) из SE лимба

See http://www2.hao.ucar.edu/sites/default/files/images/mlso/gallery/20141014_aia-kcor-lasco_cme_1024x1024_ani.gif

The Structure of Coronal Mass Ejections Recorded by the K-Coronagraph at Mauna Loa Solar Observatory

[Hongqiang Song](#), [Leping Li](#), [Zhenjun Zhou](#), [Lidong Xia](#), [Xin Cheng](#), [Yao Chen](#)

ApJL 2023

<https://arxiv.org/pdf/2307.01398.pdf>

Tackling the Unique Challenges of Low-Frequency Solar-Polarimetry with SKA-Low Precursor : The Algorithm

[Devojyoti Kansabanik](#), [Divya Oberoi](#), [Surajit Mondal](#)

ApJ 2022

<https://arxiv.org/pdf/2204.04578.pdf>

Densities Probed by Coronal Type III Radio Burst Imaging

Patrick I. [McCauley](#), [Iver H. Cairns](#), [John Morgan](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1808.04989.pdf>

Automatic Near-Real-Time Detection of CMEs in Mauna Loa K-Cor Coronagraph Images

W. T. [Thompson](#), O. C. St. Cyr, J. T. Burkepile, A. Posner

Space Weather Volume 15, Issue 10 October 2017 Pages 1288–1299

<http://sci-hub.cc/10.1002/2017SW001694>

Interplanetary coronal mass ejection observed at STEREO-A, Mars, comet 67P/Churyumov-Gerasimenko, Saturn, and New Horizons en-route to Pluto. Comparison of its Forbush decreases at 1.4, 3.1 and 9.9 AU

O. [Witasse](#), B. Sánchez-Cano, M. L. Mays, P. Kajdič

JGR 2017

<http://onlinelibrary.wiley.com/doi/10.1002/2017JA023884/pdf>

SWAP Observations of Post-flare Giant Arches in the Long-Duration 14 October 2014 Solar Eruption

Matthew J. [West](#) and Daniel B. Seaton

ApJL 2015

<http://arxiv.org/pdf/1502.00801v1.pdf>

14-15 Oct - ~19 UT: геомагнитная буря (Dst~-50) в связи с секторной границей

**Начало необычной активности очень крупной области AR 2192
Remarkably, not one of the explosions so far has hurled a significant CME
toward Earth.**

См. 14 Oct

GOES вспышки за весь период

http://www.spaceweather.com/images2014/01nov14/Sunspot2192_Summary.pdf?PHPSESSID=7fufll2gk2tudh5i4sdt437501

Probing Subsurface Flows in Active Region NOAA 12192 - Comparison with NOAA 10486

Kiran [Jain](#), [S.C. Tripathy](#), [F. Hill](#)

ApJ 2017

<https://arxiv.org/pdf/1710.02137.pdf>

The Great Solar Active Region NOAA 12192: Helicity Transport, Filament Formation, and Impact on the Polar Field

Tyler C. [McMaken](#)^{1,2} and Gordon J. D. Petrie

2017 ApJ 840 100

<http://sci-hub.cc/10.3847/1538-4357/aa6d0b>

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

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

2016

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

A Series of Homologous Jets that Drove CMEs from The Giant Solar Active Region of 2014 October

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

ApJL 2016

<http://arxiv.org/pdf/1604.05770v1.pdf>

Confined Flares in Solar Active Region 12192 from 2014 October 18 to 29

Huadong [Chen](#), Jun Zhang, Suli Ma, Shuhong Yang, Leping Li, Xin Huang, Junmin Xiao

ApJL 2015

<http://arxiv.org/pdf/1507.00651v1.pdf>

Why Is the Great Solar Active Region 12192 CME-Poor?

Xudong [Sun](#), Monica G. Bobra, J. Todd Hoeksema, Yang Liu, Yan Li, Chenglong Shen, Sebastien Couvidat, Aimee A. Norton, George H. Fisher

ApJL 804, L28 2015

<http://arxiv.org/pdf/1502.06950v1.pdf>

The Confined X-class Flares of Solar Active Region 2192

J.K. [Thalmann](#), Y. Su, M. Temmer, A. M. Veronig

ApJL 2015

<http://arxiv.org/pdf/1502.05157v1.pdf>

A Record-Setting CMEless Flare

Sam [Freeland](#) and Greg Slater.

RHESSI_Science_Nuggets, No. 239, Oct 2014

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

15 Oct

Small-scale Bright Blobs Ejected from a Sunspot Light Bridge

Fuyu [Li](#)¹, Yajie Chen^{1,2}, Yijun Hou³, Hui Tian^{1,3}, Xianyong Bai

2021 ApJ 908 201

<https://doi.org/10.3847/1538-4357/abd322>

<https://arxiv.org/pdf/2102.13545>

18 Oct

Energy and spectral analysis of confined solar flares from radio and X-ray observations

[Chengming Tan](#), [Karl-Ludwig Klein](#), [Yihua Yan](#), [Satoshi Masuda](#), [Baolin Tan](#), [Jing Huang](#), [Guowu Yuan](#)

Research in Astronomy and Astrophysics 2021

<https://arxiv.org/pdf/2108.02601.pdf>

Statistics of "Cold" Early Impulsive Solar Flares in X-ray and Microwave domains

Alexandra L. [Lysenko](#), [Alexander T. Altyntsev](#), [Natalia S. Meshalkina](#), [Dmitriy Zhdanov](#), [Gregory D. Fleishman](#)

2018

<https://arxiv.org/pdf/1802.09288.pdf>

18-26 Oct

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>

Probing Subsurface Flows in Active Region NOAA 12192 - Comparison with NOAA 10486

Kiran [Jain](#), [S.C. Tripathy](#), [F. Hill](#)

ApJ 2017

<https://arxiv.org/pdf/1710.02137.pdf>

19 Oct – 05:03: X1.1/SN LDE вспышка, S13E57, S5~310, без метров, No significant CME, практически без диммингов

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>

Are complex magnetic field structures responsible for the confined X-class flares in super active region 12192?

Jun [Zhang](#), Ting Li, Huadong Chen

ApJ 2017

<https://arxiv.org/pdf/1707.03171.pdf>

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>

Solar X-ray Emission Measured by the Vernov Mission During September – October of 2014

N. [Myagkova](#), A. V. Bogomolov, L. K. Kashapova, [V. V. Bogomolov](#), [S. I. Svertilov](#),

[M. I. Panasyuk](#), [E. A. Kuznetsova](#), [G. V. Rozhkov](#)

Solar Phys. 2016

The Confined X-class Flares of Solar Active Region 2192

J.K. [Thalmann](#), Y. Su, M. Temmer, A. M. Veronig

ApJl 2015

<http://arxiv.org/pdf/1502.05157v1.pdf>

19-27 Oct 6 X-class flares

Properties of quasi-periodic pulsations in solar flares from a single active region

C. E. [Pugh](#), [V. M. Nakariakov](#), [A.-M. Broomhall](#), [A. V. Bogomolov](#), [I. N. Myagkova](#)

A&A 2017

<https://arxiv.org/pdf/1709.09472.pdf>

20 Oct – 09:11, M3.9, S14E42; S9~2000

Searching for rapid pulsations in solar flare X-ray data

[Andrew R. Inglis](#), [Laura A. Hayes](#)

ApJ 2024

<https://arxiv.org/pdf/2406.07372>

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

A Series of Homologous Jets that Drove CMEs from The Giant Solar Active Region of 2014 October

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

ApJL 2016

<http://arxiv.org/pdf/1604.05770v1.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>

21-27 Oct

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>

The Low-Frequency Solar Corona in Circular Polarization

Patrick I. [McCauley](#), [Iver H. Cairns](#), [Stephen M. White](#), [Surajit Mondal](#), [Emil Lenc](#), [John Morgan](#), [Divya Oberoi](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1907.10878.pdf>

Synthetic Radio Imaging for Quiescent and CME-flare Scenarios

Sofia-Paraskevi [Moschou](#) (1), [Igor Sokolov](#) (2), [Ofar Cohen](#) (3), [Jeremy J. Drake](#) (1), [Dmitry Borovikov](#) (4), [Justin C. Kasper](#) (2), [Julian D. Alvarado-Gomez](#) (1), [Cecilia Garraffo](#)

ApJ 2018

<https://arxiv.org/pdf/1809.09750.pdf>

A Comparative Study of the Eruptive and Non-Eruptive Flares Produced by the Largest Active Region of Solar Cycle 24

Ranadeep [Sarkar](#), [Nandita Srivastava](#)

Solar Phys. Volume 293, Issue 2, article id. 16, 2018

<https://arxiv.org/pdf/1801.00473.pdf>

<https://sci-hub.ru/10.1007/s11207-017-1235-8>

Extreme Solar Eruptions and their Space Weather Consequences

Review

Nat [Gopalswamy](#)

2017, be published by Elsevier as a chapter in the book, "Extreme Events in the Geospace: Origins, Predictability and Consequences", Ed. Natalia Buzulukova

<https://arxiv.org/ftp/arxiv/papers/1709/1709.03165.pdf> File

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

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

ApJ 2017

<https://arxiv.org/pdf/1708.04411.pdf>

Successive Homologous Coronal Mass Ejections Driven by Shearing and Converging Motions in Solar Active Region NOAA 12371

P. [Vemareddy](#)

2017 ApJ 845 59

<http://sci-hub.cc/10.3847/1538-4357/aa7ff4>

Extreme solar storms based on solar magnetic field

Brigitte [Schmieder](#)

Varsiti Conference in Varna June 2016 2017

<https://arxiv.org/pdf/1708.01790.pdf>

File

The Great Solar Active Region NOAA 12192: Helicity Transport, Filament Formation, and Impact on the Polar Field

Tyler C. [McMaken](#)^{1,2} and Gordon J. D. Petrie

2017 ApJ 840 100

<http://sci-hub.cc/10.3847/1538-4357/aa6d0b>

Anomalous Surge of the White-Light Corona at the Onset of the Declining Phase of Solar Cycle 24

P. [Lamy](#), B. Boclet, J. Wojak, D. Vibert

Solar Physics April 2017, 292:60

<http://link.springer.com/content/pdf/10.1007%2Fs11207-017-1085-4.pdf>

Solar X-ray Emission Measured by the Vernov Mission During September – October of 2014

N. [Myagkova](#), A. V. Bogomolov, L. K. Kashapova, [V. V. Bogomolov](#), [S. I. Svertilov](#), [M. I. Panasyuk](#), [E. A. Kuznetsova](#), [G. V. Rozhkov](#)

Solar Phys. 2016

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

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

2016

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

The Exceptional Aspects of the Confined X-class Flares of Solar Active Region 2192

Julia K. [Thalmann](#), Yang Su, Manuela Temmer, Astrid M. Veronig

Proceedings IAU Symposium No. S320, "Solar and Stellar Flares and Their Effects on Planets" 2016

<http://arxiv.org/pdf/1605.03712v1.pdf>

A Series of Homologous Jets that Drove CMEs from The Giant Solar Active Region of 2014 October

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

ApJL 2016

<http://arxiv.org/pdf/1604.05770v1.pdf>

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

22 Oct – 01:59: M8.7 LDE вспышка, ~S16E17, S9~4500, опять почти без метров, только слабый, медленно дрейфующий континуум; No significant CME, **практически без диммингов; протонов нет**

-- 05:17 – M2.7 импульс

-- **14:28 –X1.6 LDE** вспышка, S14E13, S15~3700, **опять почти без метров и CME; протонов нет**

-- 15:57 - M1.4; 042-180 II/1

Properties of magnetic null points associated with X-class flares during solar cycle 24

[R. L. Edgar](#), [S. Regnier](#)

MNRAS 2024

<https://arxiv.org/pdf/2410.16778>

Properties of magnetic null points associated with X-class flares during solar cycle 24

R L [Edgar](#), S [Régnier](#)

MNRAS, Volume 532, Issue 1, July 2024, Pages 755–762,

<https://doi.org/10.1093/mnras/stae1470>

<https://watermark.silverchair.com/stae1470.pdf>

Understanding the thermal and magnetic properties of a X-class flare in the low solar atmosphere

[F. Ferrente](#), [C. Quintero Noda](#), [F. Zuccarello](#), [S. L. Guglielmino](#)

A&A 2024

<https://arxiv.org/pdf/2404.06231.pdf>

Evolution of the Ratio of Mg II Intensities During Solar Flares

[Soumya Roy](#), [Durgesh Tripathi](#)

ApJ 2024

<https://arxiv.org/pdf/2402.11189.pdf>

Are Quasi-periodic Pulsations Independent of Loop Oscillations in Solar Flare?

Fanpeng [Shi](#) (史帆鹏)^{1,2}, Dong Li (李东)^{1,2}, Zongjun Ning (宁宗军)^{1,2}, Yangfan Guo (郭杨帆)³, Song Feng (冯松)⁴, and Jun Xu (徐俊)^{1,2}

2023 ApJ 958 39

<https://iopscience.iop.org/article/10.3847/1538-4357/acf7c2/pdf>

Characteristics of the Accelerated Electrons Moving along the Loop Derived from Cyclical Microwave Brightenings at the Footpoints

Keitarou [Matsumoto](#)¹, Satoshi Masuda¹, and Takafumi Kaneko²

2023 ApJL 955 L39

<https://iopscience.iop.org/article/10.3847/2041-8213/acf99c/pdf>

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24 Oct – 07:48: M4.0 импульс, тоже из AR 2192 (S22W05), S9~1300, слабый II/IV тип, виден на нашем спектре; небольшой СМЕ

21:41: **X3.1/3B LDE**, тоже из AR 2192 (S16W21), S9-15~1600, **опять без СМЕ, Без диммингов и протонов**

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Ting Li^{1,2}, Xudong Sun³, Yijun Hou^{1,2}, Anqin Chen⁴, Shuhong Yang^{1,2}, and Jun Zhang⁵

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25 Oct – 17:08: **X1.0/3B LDE**, тоже из AR 2192 (S16W31), S9~800, **опять без CME, Без диммингов и протонов**

An Optically Thin View of the Flaring Chromosphere: Nonthermal widths in a chromospheric condensation during an X-class solar flare

[Graham S. Kerr](#), [Adam F. Kowalski](#), [Joel C. Allred](#), [Adrian N. Daw](#), [Melissa R. Kane](#)

MNRAS 2023

<https://arxiv.org/pdf/2310.07111.pdf>

Behaviour of molecular hydrogen emission in three solar flares

[Sargam M. Mulay](#), [Lyndsay Fletcher](#), [Hugh Hudson](#), [Nicolas Labrosse](#)

MNRAS 2023

<https://arxiv.org/ftp/arxiv/papers/2309/2309.07799.pdf>

Interrogating Solar Flare Loop Models with IRIS Observations 2: Plasma Properties, Energy Transport, and Future Directions

Review

[Graham S. Kerr](#)

Frontiers in Astronomy and Space Sciences 2022

<https://arxiv.org/pdf/2212.06261.pdf>

IBIS-A: The IBIS data Archive. High resolution observations of the solar photosphere and chromosphere with contextual data

[Iaria Ermolli](#), [Fabrizio Giorgi](#), [Mariarita Murabito](#), [Marco Stangalini](#), [Vincenzo Guido](#), [Marco Molinaro](#), [Paolo Romano](#), [Salvatore L. Guglielmino](#), [Giorgio Viavattene](#), [Gianna Cauzzi](#), [Serena Criscuoli](#), [Kevin P. Reardon](#), [Alexandra Tritschler](#)

A&A 2022

<https://arxiv.org/pdf/2202.09946.pdf>

Various Activities above Sunspot Light Bridges in IRIS Observations: Classification and Comparison

[Yijun Hou](#), [Ting Li](#), [Shuhong Yang](#), [Shin Toriumi](#), [Yilin Guo](#), [Jun Zhang](#)

ApJ 2022

<https://arxiv.org/pdf/2202.10159.pdf>

Connecting Chromospheric Condensation Signatures to Reconnection Driven Heating Rates in an Observed Flare

[William H. Ashfield IV](#), [Dana W. Longcope](#), [Chunming Zhu](#), [Jiong Qiu](#)

ApJ 2021

<https://arxiv.org/pdf/2112.02150.pdf>

Validation of the SMOS mission for Space Weather operations: The potential of near real-time solar observation at 1.4 GHz

[M. Flores-Soriano](#), [C. Cid](#), [R. Crapolicchio](#)

Space Weather e2020SW002649 2021

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002649>

<https://doi.org/10.1029/2020SW002649>

Multiwavelength Imaging and Spectral Analysis of Jet-like Phenomena in a Solar Active Region Using IRIS and AIA

Llŷr Dafydd [Humphries](#)¹, Erwin Verwichte², David Kuridz el, and Huw Morgan¹

2020 ApJ 898 17

<https://doi.org/10.3847/1538-4357/ab974d>

<https://sci-hub.tw/https://iopscience.iop.org/article/10.3847/1538-4357/ab974d>

Spectral Evidence for Heating at Large Column Mass in Umbral Solar Flare Kernels I: IRIS NUV Spectra of the X1 Solar Flare of 2014 Oct 25

Adam F. [Kowalski](#) (1, 2, 3), [Elizabeth Butler](#) (1), [Adrian N. Daw](#) (4), [Lyndsay Fletcher](#) (5, 6), [Joel C. Allred](#) (4, 6), [Bart De Pontieu](#) (6, 7, 8), [Graham S. Kerr](#) (4), [Gianna Cauzzi](#)

ApJ 2019

<https://arxiv.org/pdf/1905.02111.pdf>

Scaling laws of quasi-periodic pulsations in solar flares

C. E. [Pugh](#), [A.-M. Broomhall](#), [V. M. Nakariakov](#)

A&A 2019

<https://arxiv.org/pdf/1902.09627.pdf>

Solar jet-like features rooted on flare ribbons

Xiaohong [Li](#), [Jun Zhang](#), [Shuhong Yang](#), [Yijun Hou](#)

Publications of the Astronomical Society of Japan

2018

<https://arxiv.org/pdf/1811.00281.pdf>

A Comparative Study of the Eruptive and Non-Eruptive Flares Produced by the Largest Active Region of Solar Cycle 24

Ranadeep **Sarkar**, [Nandita Srivastava](#)

Solar Phys. **2018**

<https://arxiv.org/pdf/1801.00473.pdf>

On the factors determining the eruptive character of solar flares

Christian **Baumgartner**, [Julia K. Thalmann](#), [Astrid M. Veronig](#)

ApJ **2017**

<https://arxiv.org/pdf/1712.05106.pdf>

Are complex magnetic field structures responsible for the confined X-class flares in super active region 12192?

Jun **Zhang**, Ting Li, Huadong Chen

ApJ **2017**

<https://arxiv.org/pdf/1707.03171.pdf>

Triggering Process of the X1.0 Three-ribbon Flare in the Great Active Region NOAA 12192

Yumi **Bamba**^{1,2}, Satoshi Inoue², Kanya Kusano², and Daikou Shiota

2017 ApJ 838 134

<http://sci-hub.cc/10.3847/1538-4357/aa6682>

On the origin of the flare emission in IRIS' SJI 2832 filter: Balmer continuum or spectral lines?

Lucia **Kleint**, Petr Heinzel, Säm Krucker

ApJ **2017**

<https://arxiv.org/pdf/1702.07167.pdf>

Spectral manifestations of extremely strong magnetic fields in the sunspot umbra

V.G. **Lozitsky**

Advances in Space Research Volume 59, Issue 5, 1 March **2017**, Pages 1416–1424

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>

Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ **2016**

<https://arxiv.org/pdf/1611.05047v1.pdf>

The Energetics of White-light Flares Observed by SDO/HMI and RHESSI

Nengyi **Huang**, Yan Xu, Haimin Wang

Research in Astronomy and Astrophysics **2016**

<http://arxiv.org/pdf/1608.06015v1.pdf>

НАБЛЮДЕНИЯ ДИНАМИЧЕСКИХ СОБЫТИЙ НА СОЛНЦЕ В ЦЕНТРЕ И КРЫЛЬЯХ СПЕКТРАЛЬНЫХ ЛИНИЙ ВИДИМОГО, УФ И РЕНТГЕНОВСКОГО ДИАПАЗОНОВ

Дормидонтов Д.В., Пашенко М.П., Тлатов А.Г., Чернов Я.О.

Пулково «Солнечная и солнечно-земная физика – 2015», с.125

ПРЕДВСПЫШЕЧНАЯ ДИНАМИКА МИКРОВОЛНОВОГО ИЗЛУЧЕНИЯ И МАГНИТНОГО ПОЛЯ АКТИВНЫХ ОБЛАСТЕЙ СОЛНЦА

Абрамов-Максимов В.Е.1, Боровик В.Н.1, Опейкина Л.В.2, Тлатов А.Г.
«Солнечная и солнечно-земная физика – 2015» с. 7

Fine structure above a light bridge in the transition region and corona

Lokesh **Bharti**

MNRAS Letters 2015

<http://arxiv.org/pdf/1505.02412v1.pdf>

Oscillating light wall above a sunspot light bridge

Shuhong **Yang**, Jun Zhang, Fayu Jiang, Yongyuan Xiang

ApJL 2015

<http://arxiv.org/pdf/1504.03563v1.pdf>

The Confined X-class Flares of Solar Active Region 2192

J.K. **Thalmann**, Y. Su, M. Temmer, A. M. Veronig

ApJL 2015

<http://arxiv.org/pdf/1502.05157v1.pdf>

25 Oct-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>

26 Oct – 10:56: **X2.0/2B LDE**, тоже из AR 2192 (S18W40), S15~2400, **опять без CME, Без диммингов и протонов**

Image Synthesis for Solar Flare Prediction

Elad **Amar**¹ and Ohad Ben-Shahar²

ApJS 271 29 2024

<https://iopscience.iop.org/article/10.3847/1538-4365/ad1dd4/pdf>

Temperature Analysis of Flaring (AR11283) and non-Flaring (AR12194) Coronal Loops

Narges **Fathalian**, **Seyedeh Somayeh Hosseini Rad**, **Nasibeh Alipour**, **Hossein Safari**

2022

<https://arxiv.org/pdf/2201.00214.pdf>

Quasi-Periodic Pulsations in Solar and Stellar Flares: A **Review** of Underpinning Physical Mechanisms and Their Predicted Observational Signatures

I. V. Zimovets, **J. A. McLaughlin**, **A. K. Srivastava**, **D. Y. Kolotkov**, **A. A. Kuznetsov**, **E. G.**

Kupriyanova, **I.-H. Cho**, **A. R. Inglis**, **F. Reale**, **D. J. Pascoe**, **H. Tian**, **D. Yuan**, **D. Li** & **Q. M. Zhang**

Space Science Reviews volume 217, Article number: 66 (2021)

<https://link.springer.com/content/pdf/10.1007/s11214-021-00840-9.pdf>

<https://doi.org/10.1007/s11214-021-00840-9>

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>

Are complex magnetic field structures responsible for the confined X-class flares in super active region 12192?

Jun **Zhang**, Ting Li, Huadong Chen

ApJ 2017

<https://arxiv.org/pdf/1707.03171.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>

НАБЛЮДЕНИЯ ДИНАМИЧЕСКИХ СОБЫТИЙ НА СОЛНЦЕ В ЦЕНТРЕ И КРЫЛЬЯХ СПЕКТРАЛЬНЫХ ЛИНИЙ ВИДИМОГО, УФ И РЕНТГЕНОВСКОГО ДИАПАЗОНОВ

Дормидонтов Д.В., Пащенко М.П., Тлатов А.Г., Чернов Я.О.

Пулково «Солнечная и солнечно-земная физика – 2015», с.125

The Confined X-class Flares of Solar Active Region 2192

J.K. **Thalmann**, Y. Su, M. Temmer, A. M. Veronig

ApJ 801, L23 2015

<http://arxiv.org/pdf/1502.05157v1.pdf>

27 Oct – 00:28: M7.1, тоже из AR 2192 (S18W45), S9~130, **опять без СМЕ, Без диммингов и протонов**

-- 10:09: M6.7, тоже из AR 2192 (S18W50), S9~190, **опять без СМЕ, Без диммингов и протонов**

-- 14:47: **X2.0/2B LDE**, тоже из AR 2192 (S17W52), S15~760, **опять без СМЕ, Без диммингов и протонов**

Highly Energetic Electrons Accelerated in Strong Solar Flares as a Preferred Driver of Sunquakes

H. Wu, **Y. Dai**, **M. D. Ding**

ApJL 2023

<https://arxiv.org/pdf/2301.02865.pdf>

Solar Flare Ribbon Fronts I: Constraining flare energy deposition with IRIS spectroscopy

Vanessa Polito, **Graham S. Kerr**, **Yan Xu**, **Viacheslav M. Sadykov**, **Juraj Lorincik**

<https://arxiv.org/pdf/2211.05333.pdf>

ApJ 2022

<https://arxiv.org/pdf/2211.05333.pdf>

Kink oscillations of coronal loops

Review

V. M. **Nakariakov** · S. A. Anfinogentov · P. Antolin · R. Jain · D. Y. Kolotkov · E. G. Kupriyanova · D. Li · N. Magyar · G. Nisticò · D. J. Pascoe · A. K. Srivastava · J. Terradas · S. Vasheghani Farahani · G. Verth · D. Yuan · I. V. Zimovets

2021

https://warwick.ac.uk/fac/sci/physics/research/cfsa/people/valery/research/eprints/kink_nakariakov_rev1.pdf

Energy and spectral analysis of confined solar flares from radio and X-ray observations

Chengming Tan, **Karl-Ludwig Klein**, **Yihua Yan**, **Satoshi Masuda**, **Baolin Tan**, **Jing Huang**, **Guowu Yuan**

Research in Astronomy and Astrophysics 2021

<https://arxiv.org/pdf/2108.02601.pdf>

Flare induced decay-less transverse oscillations in solar coronal loops

[Sudip Mandal](#), [Hui Tian](#), [Hardi Peter](#)

A&A 2021

<https://arxiv.org/pdf/2107.02247.pdf>

Exploring mutual information between IRIS spectral lines. II. Calculating the most probable response in all spectral windows

[Brandon Panos](#), [Lucia Kleint](#)

2021

<https://arxiv.org/pdf/2106.03463.pdf>

Effects of solar flares and coronal mass ejections on Earth's horizontal magnetic field and solar wind parameters during the minimum solar cycle 24

S N A Syed [Zafar](#), [R Umar](#), [N H Sabri](#), [M H Jusoh](#), [A N Dagang](#), [A Yoshikawa](#)

Monthly Notices of the Royal Astronomical Society, Volume 504, Issue 3, July 2021, Pages 3812–3822,

<https://doi.org/10.1093/mnras/stab1161>

Investigation of the Middle Corona with SWAP and a Data-Driven Non-Potential Coronal Magnetic Field Model

[Karen A. Meyer](#), [Duncan H. Mackay](#), [Dana-Camelia Talpeanu](#), [Lisa A. Upton](#) & [Matthew J. West](#)
[Solar Physics](#) volume 295, Article number: 101 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01668-2.pdf>

Three-dimensional Magnetic Reconnection Triggering an X-class Confined Flare in Active Region 12192

Ting [Li](#), [Yijun Hou](#), [Shuhong Yang](#), [Jun Zhang](#)

ApJ 2018

<https://arxiv.org/pdf/1811.03302.pdf>

<http://iopscience.iop.org/article/10.3847/1538-4357/aaefee/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>

Non-stationary quasi-periodic pulsations in solar and stellar flares Review

[Nakariakov](#), V.M., [Kolotkov](#), D., [Kupriyanova](#), E.G., [Mehta](#), T., [Pugh](#), C.E., [Lee](#), D.-H., [Broomhall](#), A.M.

Plasma Physics and Controlled Fusion 2018

<https://warwick.ac.uk/fac/sci/physics/research/cfsa/people/valery/research/eprints/NakariakovPPCF18.pdf>

Statistics of "Cold" Early Impulsive Solar Flares in X-ray and Microwave domains

Alexandra L. [Lysenko](#), [Alexander T. Altyntsev](#), [Natalia S. Meshalkina](#), [Dmitriy Zhdanov](#), [Gregory D. Fleishman](#)

2018

<https://arxiv.org/pdf/1802.09288.pdf>

Observations of Electron-driven Evaporation during a Flare Precursor

Dong [Li](#), [Ying Li](#), [Wei Su](#), [Yu Huang](#), [Zongjun Ning](#)

ApJ 2018

<https://arxiv.org/pdf/1801.06755.pdf>

Doppler shift oscillations from a hot line observed by IRIS

Dong [Li](#), [Zongjun Ning](#), [Yu Huang](#), [N.-H. Chen](#), [Qingmin Zhang](#), [Yingna Su](#), [Wei Su](#)

ApJ 2017

<https://arxiv.org/pdf/1709.10059.pdf>

Are complex magnetic field structures responsible for the confined X-class flares in super active region 12192?

Jun **Zhang**, Ting Li, Huadong Chen

ApJ **2017**

<https://arxiv.org/pdf/1707.03171.pdf>

Explosive chromospheric evaporation driven by nonthermal electrons around one footpoint of a solar flare loop

Dong **Li**, Zongjun Ning, Yu Huang, [Qingmin Zhang](#)

ApJL **2017**

<https://arxiv.org/pdf/1705.02448.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>

Quasi-periodic pulsations with periods that change depending on whether the pulsations have thermal or nonthermal components

Dong **Li**, Qingmin Zhang, Yu Huang, Zongjun Ning, Yingna Su

A&A **2016**

<https://arxiv.org/pdf/1612.02677v1.pdf>

Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ **2016**

<https://arxiv.org/pdf/1611.05047v1.pdf>

A Series of Homologous Jets that Drove CMEs from The Giant Solar Active Region of 2014 October

Navdeep K. **Panesar**, Alphonse C. Sterling, Ronald L. Moore

ApJL **2016**

<http://arxiv.org/pdf/1604.05770v1.pdf>

Simultaneous IRIS and Hinode/EIS observation and modelling of an X-class flare **Polito V.**

See UKSP Nugget #61, Sept **2015**

<http://www.uksolphys.org/uksp-nugget/61-simultaneous-iris-and-hinodeeis-observation-and-modelling-of-an-x-class-flare/>

Solar Demon – an approach to detecting flares, dimmings, and EUV waves on SDO/AIA images

Emil **Kraaikamp*** and Cis Verbeek

J. Space Weather Space Clim., 5, A18 (**2015**) File

<http://www.swsc-journal.org/articles/swsc/pdf/2015/01/swsc140062.pdf>

Bright 30 THz impulsive solar bursts†

P. **Kaufmann**, S.M. White, R. Marcon, A.S. Kudaka, D. P. Cabezas, M.M. Cassiano, C. Francile, L.O.T. Fernandes, R.F. Hidalgo Ramirez, M. Luoni, A. Marun, P. Pereyra and R. V. de Souza

JGR **2015**

The Confined X-class Flares of Solar Active Region 2192

J.K. **Thalmann**, Y. Su, M. Temmer, A. M. Veronig

ApJ 2015
<http://arxiv.org/pdf/1502.05157v1.pdf>

28 Oct – 02:42: M3.4 и 03:32: M6.6 западные (LDE) вспышки из SUPER-SUNSPOT AR 2192 с теми же особенностями. It was the location of a backside CME late on October 28.

Various Activities above Sunspot Light Bridges in IRIS Observations: Classification and Comparison

[Yijun Hou](#), [Ting Li](#), [Shuhong Yang](#), [Shin Toriumi](#), [Yilin Guo](#), [Jun Zhang](#)

ApJ 2022
<https://arxiv.org/pdf/2202.10159.pdf>

Energy and spectral analysis of confined solar flares from radio and X-ray observations

[Chengming Tan](#), [Karl-Ludwig Klein](#), [Yihua Yan](#), [Satoshi Masuda](#), [Baolin Tan](#), [Jing Huang](#), [Guowu Yuan](#)

Research in Astronomy and Astrophysics 2021
<https://arxiv.org/pdf/2108.02601.pdf>

29 Oct

Transverse MHD waves as signatures of braiding-induced magnetic reconnection in coronal loops

[A. Ramada](#), [C. Sukarmadji](#), [Patrick Antolin](#)

ApJL 2024
<https://arxiv.org/pdf/2401.07678.pdf>

Imaging and Spectroscopic Observations of the Dynamic Processes in Limb Solar Flares

[Ke Yu](#), [Y. Li](#), [Jie Hong](#), [De-Chao Song](#), [M. D. Ding](#)

ApJ 2022
<https://arxiv.org/pdf/2207.05925.pdf>

Energy and spectral analysis of confined solar flares from radio and X-ray observations

[Chengming Tan](#), [Karl-Ludwig Klein](#), [Yihua Yan](#), [Satoshi Masuda](#), [Baolin Tan](#), [Jing Huang](#), [Guowu Yuan](#)

Research in Astronomy and Astrophysics 2021
<https://arxiv.org/pdf/2108.02601.pdf>

Frequently Occurring Reconnection Jets from Sunspot Light Bridges

Hui [Tian](#), [Vasyl Yurchyshyn](#), [Hardi Peter](#), [Sami K. Solanki](#), [Peter R. Young](#), [Lei Ni](#), [Wenda Cao](#), [Kaifan Ji](#), [Yingjie Zhu](#), [Jingwen Zhang](#), [Tanmoy Samanta](#), [Yongliang Song](#), [Jiansen He](#), [Linghua Wang](#), [Yajie Chen](#)

ApJ 2018
<https://arxiv.org/pdf/1801.06802.pdf>

High-resolution Observations of a White-light Flare with NST

V. [Yurchyshyn](#)^{1,2}, P. Kumar², V. Abramenko^{3,4}, Y. Xu⁵, P. R. Goode¹, K.-S. Cho^{2,6}, and E.-K. Lim
2017 ApJ 838 32

Significance testing for quasi-periodic pulsations in solar and stellar flares

C. E. [Pugh](#), A.-M. Broomhall, V. M. Nakariakov

A&A 2017
<https://arxiv.org/pdf/1703.07294.pdf>

Oscillating light wall above a sunspot light bridge

Shuhong [Yang](#), Jun Zhang, Fayu Jiang, Yongyuan Xiang

ApJL 2015
<http://arxiv.org/pdf/1504.03563v1.pdf>

30 Oct

Imaging and Spectroscopic Observations of the Dynamic Processes in Limb Solar Flares

[Ke Yu](#), [Y. Li](#), [Jie Hong](#), [De-Chao Song](#), [M. D. Ding](#)

ApJ 2022

<https://arxiv.org/pdf/2207.05925.pdf>

Estimate of Plasma Temperatures Across a CME-Driven Shock from a Comparison Between EUV and Radio Data

[Federica Frassati](#), [Salvatore Mancuso](#) & [Alessandro Bemporad](#)

[Solar Physics](#) volume 295, Article number: 124 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01686-0.pdf>

Three-dimensional reconstruction of CME-driven shock-streamer interaction from radio and EUV observations: a different take on the diagnostics of coronal magnetic fields

[S. Mancuso](#), [F. Frassati](#), [A. Bemporad](#), [D. Barghini](#)

Astronomy & Astrophysics Letters 2019

<https://arxiv.org/pdf/1903.06604.pdf>

Comparison of damped oscillations in solar and stellar X-ray flares

[Cho](#), I.-H., [Cho](#), K.-S., [Nakariakov](#), V.M., [Kim](#), S., [Kumar](#), P.

ApJ 2016

<http://www2.warwick.ac.uk/fac/sci/physics/research/cfsa/people/valery/cho2016.pdf>

31 Oct

Hard X-Ray Emission from Partially Occulted Solar Flares: RHESSI Observations in Two Solar Cycles

Frederic [Effenberger](#), [Fatima Rubio da Costa](#), [Mitsuo Oka](#), [Pascal Saint Hilaire](#), [Wei Liu](#), [Vahé Petrosian](#), [Lindsay Glesener](#), [Säm Krucker](#)

ApJ 2016

<https://arxiv.org/pdf/1612.02856v1.pdf>

ноябре–декабре 2014

Модуляционное влияние коротитрующей магнитной ловушки на 27-дневные вариации космических лучей в ноябре–декабре 2014 г.

[Сдобнов](#) В.Е., [Кравцова](#) М.В., [Олемской](#) С.В.

Солнечно-земная физика Том 5 № 1, 2019, С. 13–16

<https://naukaru.ru/upload/7fd3f86c299d8e1ce467f949bdfec858/files/a433754f1dfbb0d86c869ec0e64e0031.pdf>

1 Nov – 04 UT: эрупция SE волокна S22E52, 304 А; C3 LDE вспышка, CME, мягкие длительные протоны J10~5 pfu

Comprehensive Analysis of the Formation of a Shock Wave Associated with a Coronal Mass Ejection

Federica [Frassati](#)^{1,2}, [Roberto Susino](#)¹, [Salvatore Mancuso](#)¹, and [Alessandro Bemporad](#)

2019 ApJ 871 212

<http://sci-hub.tw/10.3847/1538-4357/aaf9af>

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

Bin [Chen](#)

Presentation at the Fleishman's Webinar, April 2020

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

Possible Detection of Subsecond-Period Propagating Magnetohydrodynamics Waves in Post-Reconnection Magnetic Loops during a Two-Ribbon Solar Flare

Sijie [Yu](#) (1), [Bin Chen](#)

ApJ **872** 71 **2019**

<https://arxiv.org/pdf/1901.05379.pdf>

sci-hub.tw/10.3847/1538-4357/aaff6d

RHESSI Science Nuggets #343 **2019** http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Short-Period_Waves

CESRA Nuggets #2166 March **2019** <http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2166>

Comprehensive Analysis of the Formation of a Shock Wave Associated with a Coronal Mass Ejection

Federica [Frassati](#)^{1,2}, Roberto Susino¹, Salvatore Mancuso¹, and Alessandro Bemporad

2019 ApJ 871 212

<http://sci-hub.tw/10.3847/1538-4357/aaf9af>

Magnetic Reconnection Null Points as the Origin of Semi-relativistic Electron Beams in a Solar Jet

Bin [Chen](#), [Sijie Yu](#), [Marina Battaglia](#), [Samaiyah Farid](#), [Antonia Savcheva](#), [Katharine K. Reeves](#), [Sām Krucker](#), [T. S. Bastian](#), [Fan Guo](#), [Svetlin Tassev](#)

ApJ **2018**

<https://arxiv.org/pdf/1808.05951.pdf>

Hard X-Ray Constraints on Small-Scale Coronal Heating Events

Andrew J. [Marsh](#), [David M. Smith](#), [Lindsay Glesener](#), [James A. Klimchuk](#), [Stephen J. Bradshaw](#), [Juliana Vievering](#), [Iain G. Hannah](#), [Steven Christe](#), [Shin-nosuke Ishikawa](#), [Sam Krucker](#)

ApJ **2018**

<https://arxiv.org/pdf/1808.02630.pdf>

First NuSTAR Limits on Quiet Sun Hard X-Ray Transient Events

Andrew J. [Marsh](#)¹, David M. Smith¹, Lindsay Glesener² ·····.

2017 ApJ 849 131

Study of the early phase of a Coronal Mass Ejection driven shock in EUV images

Federica [Frassati](#), Roberto Susino, Salvatore Mancuso & Alessandro Bemporad

Astrophysics and Space Science October **2017**, 362:194

<https://link.springer.com/content/pdf/10.1007%2Fs10509-017-3173-1.pdf>

Tornado-Like Evolution of A Kink-Unstable Solar Prominence

Wensi [Wang](#), Rui Liu, Yuming Wang

ApJ **2016**

<https://arxiv.org/pdf/1611.04667v1.pdf>

The First Focused Hard X-ray Images of the Sun with NuSTAR

Brian W. [Grefenstette](#), Lindsay Glesener, [Sām Krucker](#), Hugh Hudson, Iain G. Hannah, David M. Smith, Julia K. Vogel, Stephen M. White, Kristin K. Madsen, Andrew J. Marsh, Amir Caspi, Bin Chen, Albert Shih, Matej Kuhar, Steven E. Boggs, Finn E. Christensen, William W. Craig, Karl Forster, Charles J. Hailey, Fiona A. Harrison, Hiromasa Miyasaka, Daniel Stern, William W. Zhang

ApJ **2016**

<http://arxiv.org/pdf/1605.09738v1.pdf>

The first X-ray imaging spectroscopy of quiescent solar active regions with NuSTAR

I. G. [Hannah](#), B. W. Grefenstette, D. M. Smith, L. Glesener, S. Krucker, H. S. Hudson, K. K. Madsen, A. Marsh, S. M. White, A. Caspi, A. Y. Shih, F. A. Harrison, D. Stern, S. E. Boggs, F. E. Christensen, W. W. Craig, C. J. Hailey, W. W. Zhang

ApJL 820, L4 **2016**

<http://arxiv.org/pdf/1603.01069v1.pdf>

Signals at ground level of relativistic solar particles associated to the "All Saints" filament eruption on 2014

C. R. A. [Augusto](#), C. E. Navia, M. N. de Oliveira, H. Shigueoka, A.A. Nepomuceno, A. C. Fauth
2015

<http://arxiv.org/pdf/1507.03954v1.pdf>

October - November 2014 CR 2156

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>

Synthetic Radio Imaging for Quiescent and CME-flare Scenarios

Sofia-Paraskevi [Moschou](#) (1), [Igor Sokolov](#) (2), [Ofar Cohen](#) (3), [Jeremy J. Drake](#) (1), [Dmitry Borovikov](#) (4), [Justin C. Kasper](#) (2), [Julian D. Alvarado-Gomez](#) (1), [Cecilia Garraffo](#)

ApJ 2018

<https://arxiv.org/pdf/1809.09750.pdf>

Начинается высокая активность северной области AR 2205

1 Nov-23 Dec

Photospheric Driving of Non-potential Solar Coronal Magnetic Field Simulations

Marion [Weinzierl](#) and Anthony R. Yeates

HMI Science Nuggets #47 Dec 2015

<http://hmi.stanford.edu/hminuggets/?p=1367>

2 Nov – 09:41-09:55 хороший II тип на нашем спектре, из выходящей большой области AR 2205б крупный CME

3 Nov – 11:53: восточная прилибровая M2.2 вспышка из выходящей AR 2205 со II типом, эрупция волокна

22:40: восточная прилибровая M6.5 вспышка из выходящей AR 22205 со II типом, S15~2000

A novel algorithm for high fidelity spectro-polarimetric snapshot imaging of the low-frequency radio Sun using SKA-low precursor

[Devojyoti Kansabanik](#), [Divya Oberoi](#), [Surajit Mondal](#)

2022 3rd URSI Atlantic and Asia Pacific Radio Science Meeting (AT-AP-RASC)

<https://arxiv.org/pdf/2207.11924.pdf>

Tackling the Unique Challenges of Low-Frequency Solar-Polarimetry with SKA-Low Precursor : The Algorithm

[Devojyoti Kansabanik](#), [Divya Oberoi](#), [Surajit Mondal](#)

ApJ 2022

<https://arxiv.org/pdf/2204.04578.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

Discovery of correlated evolution in solar noise storm source parameters: Insights on magnetic field dynamics during a microflare

[Atul Mohan](#)

ApJ 2021

<https://arxiv.org/pdf/2102.10153.pdf>

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

[Zhichen Jing](#), [Wuqi Pan](#), [Yukun Yang](#), [Dechao Song](#), [Jun Tian](#), [Y. Li](#), [X. Cheng](#), [Jie Hong](#), [M. D. Ding](#)

ApJ 2020

<https://arxiv.org/pdf/2009.10358.pdf>

Statistical Study of GOES X-ray Quasi-Periodic Pulsations in Solar Flares

Laura A. [Hayes](#), [Andrew R. Inglis](#), [Steven Christe](#), [Brian Dennis](#), [Peter T. Gallagher](#)

ApJ 2020

<https://arxiv.org/pdf/2004.11775.pdf>

Evidence for Super-Alfvénic oscillations in sources of Solar type III radio bursts

Atul [Mohan](#), [Surajit Mondal](#), [Divya Oberoi](#), [Colin Lonsdale](#)

2018

<https://arxiv.org/pdf/1809.02588.pdf>

4D Data Cubes from Radio-Interferometric Spectroscopic Snapshot Imaging

Atul [Mohan](#), [Divya Oberoi](#)

Solar Phys. 2017

<https://arxiv.org/pdf/1710.10525.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>

Observation of quasi-periodic solar radio bursts associated with propagating fast-mode waves

C. R. [Goddard](#), G. Nisticò, V. M. Nakariakov, [I. V. Zimovets](#), [S. M. White](#)

A&A 2016

<http://arxiv.org/pdf/1608.04232v1.pdf>

Solar Demon – an approach to detecting flares, dimmings, and EUV waves on SDO/AIA images

Emil [Kraaikamp](#)* and Cis Verbeeck

J. Space Weather Space Clim., 5, A18 (2015) File

<http://www.swsc-journal.org/articles/swsc/pdf/2015/01/swsc140062.pdf>

4 Nov – 08:38 M2.6 вспышка из выходящей AR 2205 (N15E82)

Investigation of the Middle Corona with SWAP and a Data-Driven Non-Potential Coronal Magnetic Field Model

[Karen A. Meyer](#), [Duncan H. Mackay](#), [Dana-Camelia Talpeanu](#), [Lisa A. Upton](#) & [Matthew J. West](#)

[Solar Physics](#) volume 295, Article number: 101 (2020)
<https://link.springer.com/content/pdf/10.1007/s11207-020-01668-2.pdf>

Partial eruption of a filament with twisting nonuniform fields

Yi **Bi**, [Yunchun Jiang](#), [Jiayan Yang](#), [Yongyuan Xiang](#), [Yunfang Cai](#), [Weiwei Liu](#)

ApJ 2015

<http://arxiv.org/pdf/1504.03090v1.pdf>

5 Nov – 07:21-07:40: II/1 Наш **хороший** спектр. **Для иллюстрации.**

09:47: M7.9 вспышка из AR 2205 (N20E68), S15~1300, II/2 тип на нашем спектре

19:44: M2.9/1N, N17E65, II/1

Probing Velocity Dispersion inside CMEs in Inner Corona: New Insights on CME Initiation

[Satabdwa Majumdar](#), [Elke D' Huys](#), [Marilena Mierla](#), [Nitin Vashishtha](#), [Dana-Camelia Talpeanu](#), [Dipankar Banerjee](#), [Martin A. Reiss](#)

ApJL 2024

<https://arxiv.org/pdf/2407.02244>

Effects of solar flares and coronal mass ejections on Earth's horizontal magnetic field and solar wind parameters during the minimum solar cycle 24

S N A Syed [Zafar](#), [R Umar](#), [N H Sabri](#), [M H Jusoh](#), [A N Dagang](#), [A Yoshikawa](#)

Monthly Notices of the Royal Astronomical Society, Volume 504, Issue 3, July 2021, Pages 3812–3822,

<https://doi.org/10.1093/mnras/stab1161>

Coronal Conditions for the Occurrence of Type II Radio Bursts

Athanasios [Kouloumvakos](#)¹, Alexis Rouillard¹, Alexander Warmuth², Jasmina

Magdalenic^{3,4}, Immanuel. C. Jebaraj^{3,4}, Gottfried Mann², Rami Vainio⁵, and Christian Monstein⁶
2021 ApJ 913 99

<https://iopscience.iop.org/article/10.3847/1538-4357/abf435/pdf>

<https://doi.org/10.3847/1538-4357/abf435>

Хороший спектр. **Для иллюстрации.**

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>

Sources of the Multi-Lane Type II Solar Radio Burst on 5 November 2014

M. S. [Lv](#), Y. Chen, C. Y. Li, I. Zimovets, G. H. Du, B. Wang, S. W. Feng, S. L. Ma

[Solar Physics](#) December 2017, 292:194

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1218-9.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>

6 Nov – 01:39, M3.2/2N, N15E58, S5~110

03:46, M5.4/1N, N15E58, II/1, partial halo CME

22:16, M2.5/1N, N14E45, S5~250

Image Synthesis for Solar Flare Prediction

Elad **Amar**¹ and Ohad Ben-Shahar²

ApJS 271 29 2024

<https://iopscience.iop.org/article/10.3847/1538-4365/ad1dd4/pdf>

Murchison Widefield Array Observations of Anomalous Variability: A Serendipitous Night-time Detection of Interplanetary Scintillation

D. L. **Kaplan**, S. J. Tingay, P. K. Manoharan, J.-P. Macquart, P. Hancock, J. Morgan, D. A. Mitchell, R. D. Ekers, R. B. Wayth, C. Trott, T. Murphy, D. Oberoi, I. H. Cairns, L. Feng, N. Kudryavtseva, G. Bernardi, J. D. Bowman, F. Briggs, R. J. Cappallo, A. A. Deshpande, B. M. Gaensler, L. J. Greenhill, N. Hurley-Walker, B. J. Hazelton, M. Johnston-Hollitt, C. J. Lonsdale, S. R. McWhirter, E. Morgan, S. M. Ord, T. Prabu, N. Udaya Shankar, K. S. Srivani, R. Subrahmanyam, R. L. Webster, A. Williams, C. L. Williams

ApJL 2015

<http://arxiv.org/pdf/1507.08236v1.pdf>

7 Nov – 02:49, M2.7

04:25, M2.0

17:26, X1.6/3B LDE, AR 12205, N17E40, S15~260 → S3~560, partial halo CME, II/2

Survey of Magnetic Field Parameters Associated With Large Solar Flares

[Ting Li](#), [Yanfang Zheng](#), [Xuefeng Li](#), [Yijun Hou](#), [Xuebao Li](#), [Yining Zhang](#), [Anqin Chen](#)

ApJ 2024

<https://arxiv.org/pdf/2402.18890.pdf>

Non-Neutralized Electric Currents as a Proxy for Eruptive Activity in Solar Active Regions

Y. **LIU**, 1 T. TORO, 2 V. S. TITOV, 2 J. E. LEAKE, 3 X. SUN (孙旭东), 4 AND M. JIN

ApJ 2023

http://sun.stanford.edu/~yliu/papers/neutralization_finalVersion.pdf

Structural evolution of a magnetic flux rope associated with a major flare in the solar active region 12205

A. Y. **Duan**, C. W. Jiang, Y. Guo, X. S. Feng, J. Cui

A&A, 2022

<https://doi.org/10.1051/0004-6361/202142061>

Recurrent coronal jets observed by SDO/AIA

[Yan-Jie Zhang](#), [Qing-Min Zhang](#), [Jun Dai](#), [Zhe Xu](#), [Hai-Sheng Ji](#)

2021

<https://arxiv.org/pdf/2107.07194.pdf>

Electric current evolution at the footpoints of solar eruptions

Krzysztof **Barczynski**, [Guillaume Aulanier](#), [Miho Janvier](#), [Brigitte Schmieder](#), [Sophie Masson](#)

ApJ 2020

<https://arxiv.org/pdf/2004.07990.pdf>

Continuum enhancements, line profiles and magnetic field evolution during consecutive flares

Francesca **Zuccarello**, [Salvo L. Guglielmino](#), [Vincenzo Capparelli](#), [Mihalis Mathioudakis](#), [Peter H. Keys](#), [Serena Criscuoli](#), [Mariachiara Falco](#), [Mariarita Murabito](#)

ApJ 2019

<https://arxiv.org/pdf/1912.00859.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>

Continuum emission enhancements and penumbral changes observed during flares by IRIS, ROSA, and Hinode

F. [Zuccarello](#), [S.L. Guglielmino](#), [V. Capparelli](#), [M. Mathioudakis](#), [P. Keys](#), [L. Fletcher](#), [S. Criscuoli](#), [M. Falco](#), [M. Murabito](#)

Nuovo Cimento C as proceeding of the Third Meeting of the Italian Solar and Heliospheric Community 2019

<https://arxiv.org/pdf/1901.01732.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>

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>

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>

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>

On the relationship between sunspot structure and magnetic field changes associated with solar flares

Yongliang [Song](#), Mei Zhang

2016

<http://arxiv.org/pdf/1605.01163v1.pdf>

Slipping reconnection in a solar flare observed in high resolution with the GREGOR solar telescope

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

A&A 2016

<http://arxiv.org/pdf/1605.00464v1.pdf>

Multiwavelength Observations of a Slow Raise, Multi-Step X1.6 Flare and the Associated Eruption

[Yurchyshyn](#), V., Kumar, P., Cho, K.S., Lim, E.K., & Abramenko, V.

ApJ 2015

<http://www.bbso.njit.edu/~vayur/x1.6flare.pdf>

8 Nov

Investigation of the Middle Corona with SWAP and a Data-Driven Non-Potential Coronal Magnetic Field Model

[Karen A. Meyer](#), [Duncan H. Mackay](#), [Dana-Camelia Talpeanu](#), [Lisa A. Upton](#) & [Matthew J. West](#)
Solar Physics volume 295, Article number: 101 (2020)
<https://link.springer.com/content/pdf/10.1007/s11207-020-01668-2.pdf>

9 Nov – 15:32, M2.3/1B, AR AR 2205, N18E14, S15~260

A window into magnetic reconnection: IRIS observations of the consequences of reconnection during solar flares

Review

Katharine [Reeves](#)

Front. Astron. Space Sci. 9: 1041951. 2022

<https://doi.org/10.3389/fspas.2022.1041951>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.1041951/pdf>

Quasi-Periodic Pulsations in Solar and Stellar Flares: A **Review** of Underpinning Physical Mechanisms and Their Predicted Observational Signatures

[I. V. Zimovets](#), [J. A. McLaughlin](#), [A. K. Srivastava](#), [D. Y. Kolotkov](#), [A. A. Kuznetsov](#), [E. G. Kupriyanova](#), [I.-H. Cho](#), [A. R. Inglis](#), [F. Reale](#), [D. J. Pascoe](#), [H. Tian](#), [D. Yuan](#), [D. Li](#) & [Q. M. Zhang](#)
Space Science Reviews volume 217, Article number: 66 (2021)

<https://link.springer.com/content/pdf/10.1007/s11214-021-00840-9.pdf>

<https://doi.org/10.1007/s11214-021-00840-9>

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

[Jiong Qiu](#)

ApJ 2021

<https://arxiv.org/pdf/2101.11069.pdf>

Magnetic Structure of Solar Flare Regions Producing Hard X-Ray Pulsations

[I.V. Zimovets](#), [R. Wang](#), [Y.D. Liu](#), [C.C. Wang](#), [S.A. Kuznetsov](#), [I.N. Sharykin](#), [A.B. Struminsky](#), [V.M. Nakariakov](#)

JASTP Volume 174, September 2018, Pages 17-27

<https://reader.elsevier.com/reader/sd/57C406616EBCC7F3D96944EB109BA6D4F5D66AE6550663538F70F573E DBECEA44C3F56C5ECD99D9123B1BAFD853872E3>

Spectroscopic Observations of Magnetic Reconnection and Chromospheric Evaporation in an X-shaped Solar Flare

[Y. Li](#), [M. Kelly](#), [M. D. Ding](#), [J. Qiu](#), [X. S. Zhu](#), [W. Q. Gan](#)

ApJ 2017

<https://arxiv.org/pdf/1708.08586.pdf>

Magnetic Structure and Electric Currents in Solar Flare Regions Producing Hard X-Ray Pulsations

[I.V. Zimovets](#), [R. Wang](#), [Y.D. Liu](#), [C.C. Wang](#), [S.A. Kuznetsov](#), [I.N. Sharykin](#), [A.B. Struminsky](#), [V.M. Nakariakov](#)

Solar Phys. 2017

<https://arxiv.org/pdf/1708.01869.pdf>

Observations of an X-shaped Ribbon Flare in the Sun and Its Three-dimensional Magnetic Reconnection

[Y. Li](#), [J. Qiu](#), [D. W. Longcope](#), [M. D. Ding](#), [K. Yang](#)

ApJL 2016

<http://arxiv.org/pdf/1605.01833v1.pdf>

10 Nov – The CME observed on November 7 was observed arriving at 01:36 UTC on November 10 at SOHO. The interplanetary magnetic field became moderately strong, however, there haven't been any

significant southerly excursions of Bz yet and only a small increase in geomagnetic activity has been observed. Фopбyш.

Observational Study on the Fine Structure and Dynamics of a Solar Jet. II. Energy Release Process Revealed by Spectral Analysis

Takahito [Sakaue](#), [Akiko Tei](#), [Ayumi Asai](#), [Satoru Ueno](#), [Kiyoshi Ichimoto](#), [Kazunari Shibata](#)
PASJ 2017
<https://arxiv.org/pdf/1710.08441.pdf>

Observational Study on the Fine Structure and Dynamics of a Solar Jet. I. Energy Build-Up Process around a Satellite Spot

Takahito [Sakaue](#), [Akiko Tei](#), [Ayumi Asai](#), [Satoru Ueno](#), [Kiyoshi Ichimoto](#), [Kazunari Shibata](#)
PASJ 2017
<https://arxiv.org/pdf/1707.01262.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>

11 Nov

Mingantu Spectral Radioheliograph for Solar and Space Weather Studies

Yihua [Yan](#), Zhijun Chen, Wei Wang, Fei Liu, Lihong Geng, Linjie Chen, Chengming Tan, Xingyao Chen, Cang Su, and Baolin Tan
Front. Astron. Space Sci., 29 March 2021 |
<https://doi.org/10.3389/fspas.2021.584043>
<https://www.frontiersin.org/articles/10.3389/fspas.2021.584043/full>

Blue wing enhancement of the chromospheric Mg II h and k lines in a solar flare

Akiko [Tei](#), [Takahito Sakaue](#), [Tekanori J. Okamoto](#), [Tomoko Kawate](#), [Petr Heinzel](#), [Satoru Ueno](#), [Ayumi Asai](#), [Kiyoshi Ichimoto](#), [Kazunari Shibata](#)
PASJ 2018
<https://arxiv.org/pdf/1803.05237.pdf>

First radio burst imaging observation from Mingantu Ultrawide Spectral Radioheliograph,”.

[Yan](#), Y., Chen, L., and Yu, S.
(2016). “ In Solar and Stellar Flares and their Effects on Planets. Editors A. G. Kosovichev, S. L. Hawley, and P. Heinzel (Vienna, Austria: IAU Symposium), Vol. 320, 427–435.
<https://sci-hub.st/10.1017/S174392131600051X>

13 Nov

Observations of magnetic reconnection and particle acceleration locations in solar coronal jets

[Yixian Zhang](#), [Sophie Musset](#), [Lindsay Glesener](#), [Navdeep Panesar](#), [Gregory Fleishman](#)
ApJ 943 180 2023
<https://arxiv.org/pdf/2207.05668.pdf>
<https://iopscience.iop.org/article/10.3847/1538-4357/aca654/pdf>
RHESSI Science Nuggets #445 Mar 2023
https://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Particle_Acceleration_in_Two_Coronal_Jets

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

The Low-Frequency Solar Corona in Circular Polarization

Patrick I. [McCauley](#), [Iver H. Cairns](#), [Stephen M. White](#), [Surajit Mondal](#), [Emil Lenc](#), [John Morgan](#), [Divya Oberoi](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1907.10878.pdf>

15 Nov

Full velocities and propagation directions of coronal mass ejections inferred from simultaneous full-disk imaging and Sun-as-a-star spectroscopic observations

[Hong-peng Lu](#), [Hui Tian](#), [He-chao Chen](#), [Yu Xu](#), [Zhen-yong Hou](#), [Xian-yong Bai](#), [Guang-yu Tan](#), [Zi-hao Yang](#), [Jie Ren](#)

ApJ 2023

<https://arxiv.org/pdf/2305.08765.pdf>

15-17 Nov **The three homologous flares**

Standard soft X-ray records for three days early in the returned life of AR 2192, now known as AR 2209. The three similar M-class flares each have an impulsive spike, followed by a longer-duration tail resulting from the cooling of the flare loops in the usual pattern.

Back from the Far Side

Hugh [Hudson](#) and Greg Slater

RHESSI Science Nugget, No. 240, Nov 2014

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Back from the Far Side](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Back_from_the_Far_Side)

Rapidly growing NOAA AR12192 about to rotate back into Sun's near hemisphere

Charlie Lindsey

<http://solarnews.nso.edu/2014/20141115.html>

16 Nov

Observation of a reversal of breakout reconnection preceding a jet: evidence of oscillatory magnetic reconnection?

Junchao [Hong](#), [Jiayan Yang](#), [Huadong Chen](#), [Yi Bi](#), [Bo Yang](#), [Hechao Chen](#)

ApJ 2019

<https://arxiv.org/pdf/1903.01201.pdf>

16-23 Nov

Strongest coronal magnetic fields in solar cycles 23-24: probing, statistics, and implications

V. V. [Fedenev](#), S. A. Anfinogentov, G. D. Fleishman

ApJ 2023

<https://arxiv.org/pdf/2301.08922.pdf>

Improving Coronal Magnetic Field Models Using Image Optimization

Shaella I. [Jones](#)^{1,2}, Vadim M. Uritsky^{1,2}, Joseph M. Davila¹, and Vladimir N. Troyan³

2020 ApJ 896 57

<https://doi.org/10.3847/1538-4357/ab8cb9>

Properties of quasi-periodic pulsations in solar flares from a single active region

C. E. [Pugh](#), [V. M. Nakariakov](#), [A.-M. Broomhall](#), [A. V. Bogomolov](#), [I. N. Myagkova](#)

A&A 2017

<https://arxiv.org/pdf/1709.09472.pdf>

18 Nov

The Evolution of Magnetic Rayleigh-Taylor Unstable Plumes and Hybrid KH-RT Instability into A Loop-like Eruptive Prominence

Sudheer K. [Mishra](#), [A.K. Srivastava](#)

2019

<https://arxiv.org/pdf/1902.05044.pdf>

18-28 Nov

Anomalous Surge of the White-Light Corona at the Onset of the Declining Phase of Solar Cycle 24

P. [Lamy](#), B. Boclet, J. Wojak, D. Vibert

Solar Physics April 2017, 292:60

<http://link.springer.com/content/pdf/10.1007%2Fs11207-017-1085-4.pdf>

19 Nov

Stealth Non-standard-model Confined Flare Eruptions: Sudden Reconnection Events in Ostensibly Inert Magnetic Arches from Sunspots

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

ApJ 2024

<https://arxiv.org/pdf/2408.09021>

Transition Region and Chromospheric Signatures of Impulsive Heating Events.

II. Modeling

Jeffrey W. [Reep](#), Harry P. Warren, Nicholas A. Crump, Paulo J.A. Simoes

ApJ 2016

<http://arxiv.org/pdf/1607.06684v1.pdf>

Transition Region and Chromospheric Signatures of Impulsive Heating Events.

I. Observations

Harry P. [Warren](#), Jeffrey W. Reep, Nicholas A. Crump, Paulo J. A. Simoes

ApJ 2016

<http://arxiv.org/pdf/1606.09045v1.pdf>

**СТРУКТУРА БОЛЬШОЙ АКТИВНОЙ ОБЛАСТИ NOAA 12209
ПО МИКРОВОЛНОВЫМ НАБЛЮДЕНИЯМ НА РАТАН-600 И VLA**

[Кальтман](#) Т.И.1, [Бастиан](#) Т.С.2, [Богод](#) В.М.1, [Гэри](#) Д.Е.3,

[Тохчукова](#) С.Х.1, [Уайт](#) С.М.4, [Флейшман](#) Г.Д.3,

[Яснгов](#) Л.В.5, [Ступишин](#) А.Г.5, [Чен](#) Б.6

Пулково «Солнечная и солнечно-земная физика – 2015», с. 185

20 Nov

Stealth Non-standard-model Confined Flare Eruptions: Sudden Reconnection Events in Ostensibly Inert Magnetic Arches from Sunspots

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

ApJ 2024

<https://arxiv.org/pdf/2408.09021>

21 Nov

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 Low-Frequency Solar Corona in Circular Polarization

Patrick I. [McCauley](#), [Iver H. Cairns](#), [Stephen M. White](#), [Surajit Mondal](#), [Emil Lenc](#), [John Morgan](#), [Divya Oberoi](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1907.10878.pdf>

23 Nov

Statistical Study of the Magnetic Field Orientation in Solar Filaments

Yoichiro [Hanaoka](#), [Takashi Sakurai](#)

2017

<https://arxiv.org/pdf/1711.07735.pdf>

24-28 Nov

On the possibility to probe the flare productivity of an active region on the early stage of emergence

[Alexander S. Kutsenko](#), [Valentina I. Abramenko](#), [Olga K. Kutsenko](#)

MNRAS 2020

<https://arxiv.org/pdf/2011.12062.pdf>

DOI: [10.1093/mnras/staa3548](https://doi.org/10.1093/mnras/staa3548)

Investigation of the Middle Corona with SWAP and a Data-Driven Non-Potential Coronal Magnetic Field Model

[Karen A. Meyer](#), [Duncan H. Mackay](#), [Dana-Camelia Talpeanu](#), [Lisa A. Upton](#) & [Matthew J. West](#)
Solar Physics volume 295, Article number: 101 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01668-2.pdf>

25 Nov

The Low-Frequency Solar Corona in Circular Polarization

Patrick I. [McCauley](#), [Iver H. Cairns](#), [Stephen M. White](#), [Surajit Mondal](#), [Emil Lenc](#), [John Morgan](#), [Divya Oberoi](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1907.10878.pdf>

26 Nov

Three-minute Sunspot Oscillations Driven by Magnetic Reconnection in a Light Bridge

Donguk [Song](#), [Jongchul Chae](#), [Hannah Kwak](#), [Ryouhei Kano](#), [Vasyl Yurchyshyn](#), [Yong-Jae Moon](#), [Eun-Kyung Lim](#), [Jeongwoo Lee](#)

ApJL 2017

<https://arxiv.org/pdf/1711.06489.pdf>

ноябре–декабре 2014

Модуляционное влияние коротирующей магнитной ловушки на 27-дневные вариации космических лучей в ноябре–декабре 2014 г.

[Сдобнов В.Е.](#), [Кравцова М.В.](#), [Олемской С.В.](#)

Солнечно-земная физика Том 5 № 1, 2019, С. 13–16

<https://naukaru.ru/upload/7fd3f86c299d8e1ce467f949bdfec858/files/a433754f1dfbb0d86c869ec0e64e0031.pdf>

1 Dec

Dynamic Property and Magnetic Nonpotentiality of Two Types of Confined Solar Flares

[Xuchun Duan](#), [Ting Li](#), [Qihang Jing](#)

ApJ,933(2),191,2022

<https://arxiv.org/ftp/arxiv/papers/2207/2207.07004.pdf>

<https://iopscience.iop.org/article/10.3847/1538-4357/ac75c1/pdf>

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

[Jiong Qiu](#)

ApJ 2021

<https://arxiv.org/pdf/2101.11069.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

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>

1-31 Dec

Heliospheric 3-D MHD ENLIL simulations of multi-CME and multi-spacecraft events

Dusan Odstrcil

<https://www.frontiersin.org/articles/10.3389/fspas.2023.1226992/pdf>

Front. Astron. Space Sci. 10: 1226992. 2023

doi: 10.3389/fspas.2023.1226992

<https://www.frontiersin.org/articles/10.3389/fspas.2023.1226992/pdf>

4 Dec – 08:10: M1.3/1N, S24W27

18:25: M6.1, ~S21W33, S15~74, **The explosion did not hurl a CME into space,**

A New Magnetic Parameter of Active Regions Distinguishing Large Eruptive and Confined Solar Flares

Ting Li^{1,2}, Xudong Sun³, Yijun Hou^{1,2}, Anqin Chen⁴, Shuhong Yang^{1,2}, and Jun Zhang⁵

2022 ApJL 926 L14

<https://iopscience.iop.org/article/10.3847/2041-8213/ac5251/pdf>

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

[Jiong Qiu](#)

ApJ 2021

<https://arxiv.org/pdf/2101.11069.pdf>

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>

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>

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>

5 Dec

New Results from the Spectral Observations of Solar Coronal Type II Radio Bursts

R. **Ramesh**¹, C. Kathiravan¹, and S. Surya Natarajan²

2022 ApJ 926 38

<https://iopscience.iop.org/article/10.3847/1538-4357/ac4bd6/pdf>

6 Dec

Investigation of the Middle Corona with SWAP and a Data-Driven Non-Potential Coronal Magnetic Field Model

Karen A. Meyer, **Duncan H. Mackay**, **Dana-Camelia Talpeanu**, **Lisa A. Upton** & **Matthew J. West**
Solar Physics volume 295, Article number: 101 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01668-2.pdf>

Simultaneous Observations of p-mode Light Walls and Magnetic Reconnection Ejections above Sunspot Light Bridges

Yijun **Hou**^{1,2}, Jun Zhang^{1,2}, Ting Li^{1,2}, Shuhong Yang^{1,2}, and Xiaohong Li

2017 ApJL 848 L9

6-9 Dec

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>

7 Dec

Shock Heating Energy of Umbral Flashes Measured with Integral Field Unit Spectroscopy

Tetsu **Anan**, **Thomas A. Schad**, **Sarah A. Jaeggli**, **Lucas A. Tarr**

ApJ 2019

<https://arxiv.org/pdf/1907.10797.pdf>

9 Dec

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

Koval, A., Y. Chen, A. Stanislavsky, and Q.-H. Zhang

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

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

10 Dec - ~19 UT, C5.9 LDE, A filament eruption mainly in the southwest quadrant may have caused a potentially Earthbound CME.

EVIDENCE OF SIGNIFICANT ENERGY INPUT IN THE LATE PHASE OF A SOLAR FLARE FROM NuSTAR X-RAY OBSERVATIONS

Matej **Kuhar**^{1,2}, Säm Krucker^{1,3}, Iain G. Hannah⁴, Lindsay Glesener⁵, Pascal Saint-Hilaire³, Brian W. Grefenstette⁶, Hugh S. Hudson^{3,7}, Stephen M. White⁸, David M. Smith⁹, Andrew J. Marsh⁹

2017 ApJ 835 6

10-14 Dec

Formation and Dynamics of Transequatorial Loops

Avyarthana **Ghosh**, [Durgesh Tripathi](#)

A&A 2020

<https://arxiv.org/pdf/2005.12839.pdf>

11 Dec . *The second Focusing Optics X-ray Solar Imager (FOXSI) rocket flight*

FOXSI-2 Solar Microflares II: Hard X-ray Imaging Spectroscopy and Flare Energetics

[Juliana T. Vievering](#), [Lindsay Glesener](#), [P. S. Athiray](#), [Juan Camilo Buitrago-Casas](#), [Sophie Musset](#), [Daniel Ryan](#), [Shin-nosuke Ishikawa](#), [Jessie Duncan](#), [Steven Christe](#), [Säm Krucker](#)

ApJ 2020

<https://arxiv.org/pdf/2011.04753.pdf>

FOXSI-2 Solar Microflares. I. Multi-instrument Differential Emission Measure Analysis and Thermal Energies

P. S. **Athiray**^{1,2}, [Juliana Vievering](#)¹, [Lindsay Glesener](#)¹, [Shin-nosuke Ishikawa](#)³, [Noriyuki Narukage](#)⁴, [Juan Camilo Buitrago-Casas](#)⁵, [Sophie Musset](#)¹, [Andrew Inglis](#)⁶, [Steven Christe](#)⁷, [Säm Krucker](#)^{5,8}Show full author list

2020 ApJ 891 78

<https://doi.org/10.3847/1538-4357/ab7200>

Detection of nanoflare-heated plasma in the solar corona by the FOXSI-2 sounding rocket

[Shin-nosuke Ishikawa](#), [Lindsay Glesener](#), [Säm Krucker](#), [Steven Christe](#), [Juan Camilo Buitrago-Casas](#), [Noriyuki Narukage](#) & [Juliana Vievering](#)

Nature Astronomy volume 1, pages 771–774 (2017)

<https://www.nature.com/articles/s41550-017-0269-z>

The nature of energy source powering solar coronal loops driven by nanoflares

L. P. **Chitta**, [H. Peter](#), [S. K. Solanki](#)

A&A 615, L9 (2018)

<https://www.aanda.org/articles/aa/pdf/2018/07/aa33404-18.pdf>

<https://arxiv.org/pdf/1806.11045.pdf>

Hunting for Hidden Tiny Flares

Shin-nosuke **ISHIKAWA**

RHESSI Nuggets#312 November 2017

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

The First Focused Hard X-ray Images of the Sun with NuSTAR

Brian W. **Grefenstette**, [Lindsay Glesener](#), [Säm Krucker](#), [Hugh Hudson](#), [Iain G. Hannah](#), [David M. Smith](#), [Julia K. Vogel](#), [Stephen M. White](#), [Kristin K. Madsen](#), [Andrew J. Marsh](#), [Amir Caspi](#), [Bin Chen](#), [Albert Shih](#), [Matej Kuhar](#), [Steven E. Boggs](#), [Finn E. Christensen](#), [William W. Craig](#), [Karl Forster](#), [Charles J. Hailey](#), [Fiona A. Harrison](#), [Hiromasa Miyasaka](#), [Daniel Stern](#), [William W. Zhang](#)

ApJ 2016

<http://arxiv.org/pdf/1605.09738v1.pdf>

Solar Activity Studies using Microwave Imaging Observations

Nat **Gopalswamy**

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

2016

<http://arxiv.org/pdf/1605.02221v1.pdf>

12 Dec - ~ 02:30: эрупция NE/центрального волокна, CME

Small-scale Flux Emergence, Coronal Hole Heating, and Flux-tube Expansion: A Hybrid Solar Wind Model

Y.-M. **Wang**

2020 ApJ 904 199

<https://doi.org/10.3847/1538-4357/abbda6>

<https://arxiv.org/ftp/arxiv/papers/2104/2104.04016.pdf>

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>

Formation and Dynamics of Transequatorial Loops

Avyarthana **Ghosh**, [Durgesh Tripathi](#)

A&A 2020

<https://arxiv.org/pdf/2005.12839.pdf>

Solar Demon – an approach to detecting flares, dimmings, and EUV waves on SDO/AIA images

Emil **Kraaikamp*** and Cis Verbeeck

J. Space Weather Space Clim., 5, A18 (2015) File

<http://www.swsc-journal.org/articles/swsc/pdf/2015/01/swsc140062.pdf>

13 Dec - небольшое медленное протонное возрастание от залимбовой вспышки в ~14

UT балла ~M5 по пересвету, ~S20W**143**, видимо, AR 12222

1448-1451 SAG C RSP 107-180 II/2 955, крупный CME

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/abs/1905.04456)

Recent Voyager Evidence for Rapid Transport of Flare-Generated Disturbances by Polar Coronal Hole Streams

D S **Intriligator**¹, W D Miller¹, J Intriligator^{1,2}, W Webber³, W Sun⁴, T Detman¹, M Dryer¹ and C Deehr⁴

[Journal of Physics: Conference Series](#), Volume 900, Number 1 012010 2017

<http://iopscience.iop.org/article/10.1088/1742-6596/900/1/012010/pdf>

14 Dec

Center-to-limb Variations in Solar Plage Using IRIS Observations

Pradeep **Kayshap** and Peter R. Young

2024 ApJ 977 141

<https://iopscience.iop.org/article/10.3847/1538-4357/ad901d/pdf>

Rotating Network Jets in the quiet Sun as Observed by IRIS

[P. Kayshap](#), [K. Murawski](#), [A.K. Srivastava](#), [B.N. Dwivedi](#)

A&A 2018

<https://arxiv.org/pdf/1805.02517.pdf>

Searching for Extreme SEP Events with STEREO,

[Cohen](#), C. M. S., J. G. Luhmann, R. A. Mewaldt, M. L. Mays, H. M. Bain, Y. Li, and C. O. Lee (2017), Proceedings of 35th ICRC Conference, PoS(ICRC2017), id.134, 1–8.

<https://pos.sissa.it/301/134/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

15 Dec

The Sun's Non-Potential Corona over Solar Cycle 24

[Anthony R. Yeates](#)

Solar Phys. 2024

<https://arxiv.org/pdf/2405.14322>

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

17 Dec – 01:50, M1.1, S11E33

ALMOST-X FLARE: 04:51, M8.7, S18E08 (AR 2242), , Type II, S5-9~780-770

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

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

Dimensionality of Solar Magnetic Reconnection

Review

Jeongwoo **Lee**

Reviews of Modern Plasma Physics 2022

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

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

Microwave Perspective on Magnetic Breakout Eruption

Jeongwoo **Lee**

Front. Astron. Space Sci., 2022

<https://www.frontiersin.org/articles/10.3389/fspas.2022.855737/full>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.855737/pdf>

<https://doi.org/10.3389/fspas.2022.855737>

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>

Quasi-Periodic Pulsations in Solar and Stellar Flares: A **Review** of Underpinning Physical Mechanisms and Their Predicted Observational Signatures

[I. V. Zimovets](#), [J. A. McLaughlin](#), [A. K. Srivastava](#), [D. Y. Kolotkov](#), [A. A. Kuznetsov](#), [E. G.](#)

[Kupriyanova](#), [I.-H. Cho](#), [A. R. Inglis](#), [F. Reale](#), [D. J. Pascoe](#), [H. Tian](#), [D. Yuan](#), [D. Li](#) & [Q. M. Zhang](#)

Space Science Reviews volume 217, Article number: 66 (2021)

<https://link.springer.com/content/pdf/10.1007/s11214-021-00840-9.pdf>

<https://doi.org/10.1007/s11214-021-00840-9>

Mingantu Spectral Radioheliograph for Solar and Space Weather Studies

Yihua **Yan**, Zhijun Chen, Wei Wang, Fei Liu, Lihong Geng, Linjie Chen, Chengming Tan, Xingyao Chen, Cang Su, and Baolin Tan

Front. Astron. Space Sci., 29 March 2021 |

<https://doi.org/10.3389/fspas.2021.584043>

<https://www.frontiersin.org/articles/10.3389/fspas.2021.584043/full>

The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

Jiong **Qiu**

ApJ 2021

<https://arxiv.org/pdf/2101.11069.pdf>

Evolutionary stages and triggering process of a complex eruptive flare with circular and parallel ribbons

Navin Chandra **Joshi** (USO/PRL, Dept. of Phys./SRM Univ.), **Bhuwan Joshi** (USO/PRL), **Prabir K. Mitra** (USO/PRL, Dept. of Phys./Gujarat Univ.)

MNRAS 2021

<https://arxiv.org/pdf/2101.09923.pdf>

The Missing Cool Corona in the Flat Magnetic Field around Solar Active Regions

Talwinder **Singh**, Alphonse C. Sterling, Ronald L. Moore

2021

<https://arxiv.org/pdf/2012.15406.pdf>

Microwave Study of a Solar Circular Ribbon Flare

Jeongwoo **Lee**¹, Stephen M. White², Xingyao Chen³, Yao Chen⁴, Hao Ning⁴, Bo Li⁴, and Satoshi Masuda⁵

2020 ApJL 901 L10

<https://doi.org/10.3847/2041-8213/abb4dd>

Heating and Eruption of a Solar Circular-ribbon Flare

Jeongwoo **Lee**^{1,2,3}, Judith T. Karpen⁴, Chang Liu^{1,2,3}, and Haimin Wang^{1,2,3}

2020 ApJ 893 158

<https://doi.org/10.3847/1538-4357/ab80c4>

<https://arxiv.org/pdf/2008.05020.pdf>

The Eruption of Outer Spine-like Loops Leading to a Double-stage Circular-ribbon Flare

Chang **Liu**^{1,2,3}, Jeongwoo Lee^{1,3}, and Haimin Wang^{1,2,3}

2019 ApJ 883 47

<https://doi.org/10.3847/1538-4357/ab3923>

Quasi-periodic Pulsations before and during a Solar Flare in AR 12242

Xingyao **Chen**, Yihua Yan, Baolin Tan, Jing Huang, Wei Wang, Linjie Chen, Yin Zhang, Chengming Tan, Donghao Liu, and Satoshi Masuda

2019 ApJ 878 78

<https://iopscience.iop.org/article/10.3847/1538-4357/ab1d64/pdf>

Recent Voyager Evidence for Rapid Transport of Flare-Generated Disturbances by Polar Coronal Hole Streams

D S **Intriligator**¹, W D Miller¹, J Intriligator^{1,2}, W Webber³, W Sun⁴, T Detman¹, M Dyer¹ and C Deehr⁴

Journal of Physics: Conference Series, Volume 900, Number 1 012010 2017

<http://iopscience.iop.org/article/10.1088/1742-6596/900/1/012010/pdf>

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>

18 Dec - 21:58: Big sunspot AR2241 erupted, producing a strong M6/2N-class solar flare, S11E15, S5~420, type II, large CME.

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics

2024

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

Formation of an observed eruptive flux rope above the torus instability threshold through tether-cutting magnetic reconnection

[Avijet Prasad](#), [Sanjay Kumar](#), [Alphonse C. Sterling](#), [Ronald L. Moore](#), [Guillaume Aulanier](#), [R. Bhattacharyya](#), [Qiang Hu](#)

A&A 2023

<https://arxiv.org/pdf/2307.06572.pdf>

The Role of Magnetic Shear in Reconnection-Driven Flare Energy Release

[J. Qiu](#), [M. Alaoui](#), [S. K. Antiochos](#), [J. T. Dahlin](#), [M. Swisdak](#), [J. F. Drake](#), [A. Robison](#), [C. R. DeVore](#), [V. M. Uritsky](#)

ApJ 2023

<https://arxiv.org/pdf/2306.14419.pdf>

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>

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

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Y. [LIU](#) , 1 T. TORIUMI , 2 V. S. TITOV , 2 J. E. LEAKE , 3 X. SUN (孙旭东) , 4 AND M. JIN

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The Neupert Effect of Flare UltraViolet and Soft X-ray Emissions

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Ting [Li](#), [Yijun Hou](#), [Shuhong Yang](#), [Jun Zhang](#), [Lijuan Liu](#), [Astrid M. Veronig](#)

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Investigation of the Middle Corona with SWAP and a Data-Driven Non-Potential Coronal Magnetic Field Model

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[Hirdesh Kumar](#), [Brajesh Kumar](#)

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Unraveling the Links among Sympathetic Eruptions

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A diagnostic of coronal elemental behavior during the inverse FIP effect in solar flares
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Does Nearby Open Flux Affect the Eruptivity of Solar Active Regions?
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Features of Microwave Radiation and Magnetographic Characteristics of Solar Active Region NOAA 12242 Before the X1.8 Flare on December 20, 2014
V.E. [Abramov-Maximov](#) (1), [V.N.Borovik](#) (1), [L.V.Opeikina](#) (2), [A.G.Tlatov](#) (1), [L.V.Yasnov](#) (3) ((1) Central Astronomical Observatory at Pulkovo, Saint-Petersburg, Russia, (2) Special Astrophysical Observatory, Nizhnii Arkhyz, Russia, (3) St. Petersburg State University, Saint-Petersburg, Russia)
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Over a 48-hour period beginning on Dec. 21st, a series of three CMEs swept past Earth, delivering glancing blows to our planet's magnetosphere.

21 Dec

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Probing Velocity Dispersion inside CMEs in Inner Corona: New Insights on CME Initiation

[Satabdwa Majumdar](#), [Elke D' Huys](#), [Marilena Mierla](#), [Nitin Vashishtha](#), [Dana-Camelia Talpeanu](#), [Dipankar Banerjee](#), [Martin A. Reiss](#)
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V. [Aparna](#) and Petrus C. Martens
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D. [Lingri](#), H. Mavromichalaki, A. Belov, E. Eroshenko, V. Yanke, A. Abunin, M. Abunina
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<https://arxiv.org/pdf/1612.08900v1.pdf>

21-25 Dec

Refined Modeling of Geoeffective Fast Halo CMEs During Solar Cycle 24

E. [Yordanova](#), [M. Temmer](#), [M. Dumbović](#), [C. Scolini](#), [E. Paouris](#), [A. L. E. Werner](#), [A. P. Dimmock](#), [L. Sorriso-Valvo](#)
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22 Dec – геомагнитная буря Dst~−73 , **значительный форбуш** от эрупции 20-ого – 22:25: эрупция, AR 2241, S13W44, C5.7; небольшие, мягкие, медленные протоны

A “Space Weather Buoy” Operated by Citizen Scientists

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24 Dec – геомагнитная буря Dst~−55

Refined Modeling of Geoeffective Fast Halo CMEs During Solar Cycle 24

E. [Yordanova](#), [M. Temmer](#), [M. Dumbović](#), [C. Scolini](#), [E. Paouris](#), [A. L. E. Werner](#), [A. P. Dimmock](#), [L. Sorriso-Valvo](#)
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Spectral Analysis of Forbush Decreases Using a New Yield Function

M. [Livada](#) & [H. Mavromichalaki](#)
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X. **Cheng**, [B. Kliem](#), [M. D. Ding](#)

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Interchange reconnection associated with a confined filament eruption: Implications for the source of transient cold-dense plasma in solar winds

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26 Dec – **геомагнитная буря** Dst~-55