

2015

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

ftp://ftp.sec.noaa.gov/pub/warehouse/2015/2015_plots/xray/
ftp://ftp.sec.noaa.gov/pub/warehouse/2015/2015_plots/proton/

1 Jan

Large Scale Evaluation of Deep Learning-based Explainable Solar Flare Forecasting Models with Attribution-based Proximity Analysis

[Temitope Adeyeha](#), [Chetraj Pandey](#), [Berkay Aydin](#)

IEEE International Conference on Big Data 2024

<https://arxiv.org/pdf/2411.18070>

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>

2 Jan

The Flare Likelihood and Region Eruption Forecasting (FLARECAST) Project: Flare forecasting in the big data & machine learning era **Review**

[M. K. Georgoulis](#), [D. S. Bloomfield](#), [M. Piana](#), [A. M. Massone](#), [M. Soldati](#), [P. T. Gallagher](#), [E. Pariat](#), [N. Vilmer](#), [E. Buchlin](#), [F. Baudin](#), [A. Csillaghy](#), [H. Sathiapal](#), [D. R. Jackson](#), [P. Alingery](#), [F. Benvenuto](#), [C. Campi](#), [K. Florios](#), [C. Gontikakis](#), [C. Guennou](#), [J. A. Guerra](#), [I. Kontogiannis](#), [V. Latorre](#), [S. A. Murray](#), [S.-H. Park](#), [S. von Stachelski](#), [A. Torbica](#), [D. Vischi](#), [M. Worsfold](#)

Journal of Space Weather and Space Climate,

2021

<https://arxiv.org/pdf/2105.05993.pdf>

3 Jan

Determining the source and eruption dynamics of a stealth CME using NLFFF modelling and MHD simulations

[Stephanie L. Yardley](#), [Paolo Pagano](#), [Duncan H. Mackay](#), [Lisa A. Upton](#)

A&A 2021

<https://arxiv.org/pdf/2106.14800.pdf>

3-7 Jan

Understanding the Origins of Problem Geomagnetic Storms Associated With "Stealth" Coronal Mass Ejections

[Nariaki V. Nitta](#), [Tamitha Mulligan](#), [Emilia K. J. Kilpua](#), [Benjamin J. Lynch](#), [Marilena Mierla](#), [Jennifer O'Kane](#), [Paolo Pagano](#), [Erika Palmerio](#), [Jens Pomoell](#), [Ian G. Richardson](#), [Luciano Rodriguez](#), [Alexis P. Rouillard](#), [Suvadip Sinha](#), [Nandita Srivastava](#), [Dana-Camelia Talpeanu](#), [Stephanie L. Yardley](#), [Andrei N. Zhukov](#)

Space Science Reviews 2021

<https://arxiv.org/pdf/2110.08408.pdf> File

Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures

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

Solar Physics September 2017, 292:125 File

4 Jan

Study of Reconnection Dynamics and Plasma Relaxation in MHD simulation of a Solar Flare

[Satyam Agarwal](#), [Ramit Bhattacharyya](#), [Shangbin Yang](#)

Solar Phys. 2024

<https://arxiv.org/pdf/2401.11417.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>

5 Jan

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>

6-7 Jan

REDEFINING THE BOUNDARIES OF INTERPLANETARY CORONAL MASS EJECTIONS FROM OBSERVATIONS AT THE ECLIPTIC PLANE

C. [Cid](#), J. Palacios, E. Saiz, and A. Guerrero

2016 ApJ 828 11

7 Jan – Значительная геобуря Dst~-105, unexpected, related to the arrival of a CME originally expected to miss Earth. There was no solar wind shock and the passage of the magnetic cloud may have been related to a corotating interaction region associated with CH649.

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>

КОСМИЧЕСКИЕ ЛУЧИ В ПЕРИОД ГЕОМАГНИТНОГО ВОЗМУЩЕНИЯ В ЯНВАРЕ 2015 Г

[КРАВЦОВА](#) М.В.*¹, СДОБНОВ В.Е.¹

Косм. Исслед. Том: 57 Номер: [1](#) Год: 2019 Страницы: 17-20

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).

7-8 Jan

Measurements and Simulations of the Geomagnetically Induced Currents in Low-latitude Power Networks During Geomagnetic Storms

[J. J. Zhang](#) , [Y. Q. Yu](#) , [C. Wang](#), [D. Du](#) , [D. Wei](#) , [L. G. Liu](#)

Space Weather [Volume18, Issue8](#) e2020SW002549 2020

<https://doi.org/10.1029/2020SW002549>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002549>

7-10 Jan

Magnetic evolution of active regions: formation and eruption of magnetic flux ropes

Review

[P. Vemareddy](#)

IAU 388 proc. 2024

<https://arxiv.org/pdf/2410.02670>

Successive Injection of Opposite Magnetic Helicity: Evidence for Active Regions without Coronal Mass Ejections

[P. Vemareddy](#)

MNRAS 2021

<https://arxiv.org/pdf/2108.07741.pdf>

8 Jan

Estimating the coronal and chromospheric magnetic fields of solar active regions as observed with the Nobeyama Radioheliograph Compared with the Extrapolated Linear Force-Free Field

A. [Mouner](#), [Abdelrazek M. K. Shaltout](#), [M. M. Beheary](#), [K.A.K. Gadallah](#), [K. A. Edris](#)

2018

<https://arxiv.org/ftp/arxiv/papers/1802/1802.04598.pdf>

9 Jan

The Evolution of Photospheric Magnetic Fields at the Footpoints of Reconnected Structures in the Solar Atmosphere

Tao [Ding](#)¹, Jun Zhang¹, Yue Fang¹, Junchao Hong², Yi Bi², and Yongyuan Xiang²

2024 ApJ 964 16

<https://iopscience.iop.org/article/10.3847/1538-4357/ad245f/pdf>

Observational Evidence of Magnetic Reconnection Associated with Magnetic Flux Cancellation

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

2018

<https://arxiv.org/pdf/1806.04857.pdf>

10 Jan

What Causes Faint Solar Coronal Jets from Emerging Flux Regions in Coronal Holes?

Abigail R. [Harden](#), [Navdeep K. Panesar](#), [Ronald L. Moore](#), [Alphonse C. Sterling](#), [Mitzi L. Adams](#)

ApJ 2021

<https://arxiv.org/pdf/2103.07813.pdf>

11 Jan

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>

12 Jan - ~15 UT: заметная эрупция SE волокна(?)

From Pseudostreamer Jets to CMEs: Observations of the Breakout Continuum

[Pankaj Kumar](#), [Judith T. Karpen](#), [Spiro K. Antiochos](#), [Peter F. Wyper](#), [C. Richard DeVore](#), [Benjamin J. Lynch](#)

ApJ 2020

<https://arxiv.org/pdf/2011.07029.pdf> File

13 Jan – Sunspot AR2257 (N06W70) erupted, producing an M5/2B-class short-LDE flare at 04:24 UT. S5~350. Почти без метрового излучения, без CME и без протонов.

Temperature and differential emission measure evolution of a limb flare on 13 January 2015

M. Bröse^{1,2,3}, A. Warmuth¹, T. Sakao^{4,5} and Y. Su^{6,7}

A&A 663, A18 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/07/aa41868-21.pdf>

A Two-ribbon White-light Flare Associated with a Failed Solar Eruption Observed by ONSET, SDO, and IRIS

X. Cheng, Q. Hao, M. D. Ding, K. Liu, P. F. Chen, C. Fang, Y. D. Liu

ApJ 2015

<http://arxiv.org/pdf/1507.02109v1.pdf>

14 Jan

A Statistical Study of Solar Radio Type III Bursts and Space Weather Implication

Theogene Ndacyisenga, Jean Uwamahoro, K. Sasikumar Raja, Christian Monstein

Advances in Space Research 2020

<https://arxiv.org/pdf/2012.01210.pdf>

Solar Active Region Coronal Jets II: Triggering and Evolution of Violent Jets

Alphonse C. Sterling, Ronald L. Moore, David A. Falconer, Navdeep K. Panesar, Francisco Martinez
Astrophysical Journal, 844:28 (20pp), 2017

<https://arxiv.org/pdf/1705.03040.pdf>

<https://iopscience.iop.org/article/10.3847/1538-4357/aa7945/pdf>

MINIFILAMENT ERUPTION AS THE SOURCE OF A BLOWOUT JET, C-CLASS FLARE, AND TYPE-III RADIO BURST

Junchao Hong, Yunchun Jiang, Jiayan Yang, Haidong Li¹, and Zhe Xu¹

2017 ApJ 835 35

<http://sci-hub.cc/doi/10.3847/1538-4357/835/1/35>

15 Jan

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>

16-19 Jan

Extended statistical analysis of emerging solar active regions

Alexander S Kutsenko, Valentina I Abramenko, Alexei A Pevtsov

MNRAS Volume 484, Issue 3, 11 April 2019, Pages 4393–4400,

<http://sci-hub.tw/10.1093/mnras/stz308>

<https://arxiv.org/pdf/1811.12089.pdf>

19 Jan

Solar Kinetic Energy and Cross Helicity Spectra

Hongqi Zhang¹ and Axel Brandenburg

2018 ApJL 862 L17

<http://sci-hub.tw/http://iopscience.iop.org/article/10.3847/2041-8213/aad337/meta>

<https://arxiv.org/pdf/1804.10321.pdf>

Intermittency spectra of current helicity in solar active regions

A. S. [Kutsenko](#), [V. I. Abramenko](#), [K. M. Kuzanyan](#), [Haqing Xu](#), [Hongqi Zhang](#)

MNRAS 2018

<https://arxiv.org/pdf/1802.02323.pdf>

20 Jan

Solar Jet Hunter: a citizen science initiative to identify coronal jets in EUV data sets

[S. Musset](#), [P. Jol](#), [R. Sankar](#), [S. Alnahari](#), [C. Kapsiak](#), [E. Ostlund](#), [K. Lasko](#), [L. Glesener](#), [L. Fortson](#), [G. D. Fleishman](#), [N. K. Panesar](#), [Y. Zhang](#), [M. Jeunon](#), [N. Hurlburt](#)

A&A 2023

<https://arxiv.org/pdf/2309.14871.pdf>

The Brightness Temperature of the Quiet Solar Chromosphere at 2.6 mm

Kazumasa [Iwai](#), Masumi Shimojo, Shinichiro Asayama, Tetsuhiro Minamidani, Stephen White, Timothy Bastian, Masao Saito

Solar Phys. 292:22 2017

<https://arxiv.org/pdf/1612.08241v1.pdf>

[CESRA] highlight #1325 Apr 2017

<http://www.astro.gla.ac.uk/users/eduard/cesra/?p=1325>

22 Jan

Solar Jet Hunter: a citizen science initiative to identify coronal jets in EUV data sets

[S. Musset](#), [P. Jol](#), [R. Sankar](#), [S. Alnahari](#), [C. Kapsiak](#), [E. Ostlund](#), [K. Lasko](#), [L. Glesener](#), [L. Fortson](#), [G. D. Fleishman](#), [N. K. Panesar](#), [Y. Zhang](#), [M. Jeunon](#), [N. Hurlburt](#)

A&A 2023

<https://arxiv.org/pdf/2309.14871.pdf>

24 Jan

Excitation and Damping of Slow Magnetosonic Waves in Flaring Hot Coronal Loops: Effects of Compressive Viscosity

[Leon Ofman](#), [Tongjiang Wang](#)

ApJ 2021

<https://arxiv.org/pdf/2111.10696.pdf>

Multi-instrument observations of a failed flare eruption associated with MHD waves in a loop bundle

Giuseppe [Nisticò](#), Vanessa Polito, Valery M. Nakariakov, Giulio del Zanna

A&A 2016

<https://arxiv.org/pdf/1612.02077v1.pdf>

24-28 Jan

Magnetic Power Spectra of Emerging Active Regions

Olga K. [Kutsenko](#), [Alexander S. Kutsenko](#), [Valentina I. Abramenko](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1907.07952.pdf>

26 Jan

Development of a Confined Circular-cum-parallel Ribbon Flare and Associated Pre-flare Activity

[Pooja Devi](#), [Bhuwan Joshi](#), [Ramesh Chandra](#), [Prabir K. Mitra](#), [Astrid M. Veronig](#), [Reetika Joshi](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2005.09586.pdf>

28 Jan

On the partial eruption of a bifurcated solar filament structure

[Aabha Monga](#), [Rahul Sharma](#), [Jiajia Liu](#), [Consuelo Cid](#), [Wahab Uddin](#), [Ramesh Chandra](#), [Robertus Erdelyi](#)
MNRAS 2020
<https://arxiv.org/pdf/2009.08619.pdf>

29 Jan

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>

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>

Generation mechanisms of quasi-parallel and quasi-circular flare ribbons in a confined flare

Aaron [Hernandez-Perez](#), [Julia K. Thalmann](#), [Astrid M. Veronig](#), [Yang Su](#), [Peter Gömöry](#), [Ewan C. Dickson](#)
ApJ 2017
<https://arxiv.org/pdf/1708.08612.pdf>

29-30 Jan

Transition from circular-ribbon to parallel-ribbon flares associated with a bifurcated magnetic flux rope

Z. [Zhong](#), [Y. Guo](#), [M. D. Ding](#), [C. Fang](#), [Q. Hao](#)
ApJ 2018
<https://arxiv.org/pdf/1812.10223.pdf>

30 Jan

Stability of the coronal magnetic field around large confined and eruptive solar flares

[Manu Gupta](#), [J. K. Thalmann](#), [A. M. Veronig](#)
A&A 2024
<https://arxiv.org/pdf/2402.12254.pdf>

Magnetic helicity and energy budget around large confined and eruptive solar flares

[Manu Gupta](#), [J. K. Thalmann](#), [A. M. Veronig](#)
A&A 2021
<https://arxiv.org/pdf/2106.08781.pdf>

The role of non-axisymmetry of magnetic flux rope in constraining solar eruptions

[Ze Zhong](#), [Yang Guo](#), [Mingde Ding](#)
Nature Communications volume 12, Article number: 2734 (2021)
<https://arxiv.org/pdf/2105.07339.pdf>

Comparing two intervals of exceptionally strong solar rotation recurrence of galactic cosmic rays

A. [Gil](#) and K. Mursula
JGR 2018
<http://sci-hub.tw/https://onlinelibrary.wiley.com/doi/abs/10.1029/2018JA025523>

1 Feb

Critical magnetic field strengths for solar coronal plumes in quiet regions and coronal holes?

[Ellis A. Avallone](#), [Sanjiv K. Tiwari](#), [Navdeep K. Tiwari](#), [Ronald L. Moore](#), [Amy Winebarger](#)
ApJ 2018

<https://arxiv.org/pdf/1805.11188.pdf>

1-28 Feb

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

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

Solar Phys. **2020**

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

2 Feb

Achievements and Lessons Learned from Successful Small Satellite Missions for Space Weather-Oriented Research

[Harlan E. Spence](#), [Amir Caspi](#), [Hasan Bahcivan](#), [Jesus Nieves-Chinchilla](#), [Geoff Crowley](#), [James Cutler](#), [Chad Fish](#), [David Jackson](#), [Therese Moretto Jørgensen](#), [David Klumpar](#), [Xinlin Li](#), [James P. Mason](#), [Nick Paschalidis](#), [John Sample](#), [Sonya Smith](#), [Charles M. Swenson](#), [Thomas N. Woods](#)

Space Weather **2022**

<https://arxiv.org/ftp/arxiv/papers/2206/2206.02968.pdf>

2-12 Feb

[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>

3 Feb

Evolution of the Ratio of Mg II Intensities During Solar Flares

[Soumya Roy](#), [Durgesh Tripathi](#)

ApJ **2024**

<https://arxiv.org/pdf/2402.11189.pdf>

Rotating Magnetic Structures Associated with a Quasi-circular Ribbon Flare

Haidong [Li](#)^{1,2}, Yunchun Jiang¹, Jiayan Yang¹, Bo Yang^{1,2}, Zhe Xu^{1,2}, Junchao Hong¹, and Yi Bi¹
2017 ApJ 836 235 10.3847/1538-4357/aa5eac

<http://sci-hub.cc/10.3847/1538-4357/aa5eac>

5 Feb

Exploring the magnetic and thermal evolution of a coronal jet

[Sushree S Nayak](#), [Samrat Sen](#), [Arpit Kumar Shrivastav](#), [R. Bhattacharyya](#), [P.S. Athiray](#)

ApJ **2024**

<https://arxiv.org/pdf/2409.03484>

Interaction of solar jets with filaments: Triggering of large-amplitude filament oscillations

[Reetika Joshi](#), [Manuel Luna](#), [Brigitte Schmieder](#), [Fernando Moreno-Insertis](#), [Ramesh Chandra](#)

A&A **2023**

<https://arxiv.org/pdf/2301.13103.pdf>

6 Feb

Blowout Surge due to Interaction between a Solar Filament and Coronal Loops

Haidong [Li](#)^{1,2,3}, Yunchun Jiang^{1,2}, Jiayan Yang^{1,2}, Zhining Qu⁴, Bo Yang^{1,2}, Zhe Xu^{1,2,3}, Yi Bi^{1,2}, Junchao Hong^{1,2}, and Hechao Chen

2017 ApJL 842 L20

<http://iopscience.iop.org/sci-hub.cc/2041-8205/842/2/L20/>

7 Feb

Solar Ultraviolet Bursts in a Coordinated Observation of IRIS, Hinode and SDO

Yajie [Chen](#), [Hui Tian](#), [Xiaoshuai Zhu](#), [Tanmoy Samanta](#), [Linghua Wang](#), [Jiansen He](#)

Science China, Technological Sciences 2019

<https://arxiv.org/pdf/1902.04226.pdf>

9 Feb

Eruption of EUV Hot-Channel near Solar Limb and Associated Moving Type-IV Radio Burst

[P. Vemareddy](#), [P. Démoulin](#), [K. Sasikumar Raja](#), [J. Zhang](#), [N. Gopalswamy](#), [N. Vasantharaju](#)

ApJ 2022

<https://arxiv.org/pdf/2201.06899.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>

9-10 Feb

The source and engine of coronal mass ejections

Review

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

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

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

10 Feb

Analysis of quiet-sun turbulence on the basis of SDO/HMI and Goode Solar Telescope data

[Valentina I. Abramenko](#), [Vasyl B. Yurchyshyn](#)

MNRAS 2020

<https://arxiv.org/pdf/2008.06264.pdf>

Which Bow Shock Theory, Gasdynamic or Magnetohydrodynamic, Better Explains CME Stand-off Distance Ratios from LASCO-C2 Observations ?

Jae-Ok [Lee](#)^{1,2}, Y.-J. Moon¹, Jin-Yi Lee³, R.-S. Kim², and K.-S. Cho²

2017 ApJ 838 70

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

12 Feb

Improvements to the Empirical Solar Wind Forecast (ESWF) model

D. [Milošić](#), [M. Temmer](#), [S. G. Heinemann](#), [T. Podladchikova](#), [A. Veronig](#) & [B. Vršnak](#)

[Solar Physics](#) volume 298, Article number: 45 (2023)

<https://link.springer.com/content/pdf/10.1007/s11207-022-02102-5.pdf>

13 Feb

Subarcsecond Bright Points and Quasi-periodic Upflows Below a Quiescent Filament Observed by the IRIS

Ting [Li](#), Jun Zhang

A&A 2016

<http://arxiv.org/pdf/1603.02809v1.pdf>

14 Feb

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>

15 Feb

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>

Hot prominence spicules launched from turbulent cool solar prominences

L. P. **Chitta**, [H. Peter](#), [L. Li](#)

A&A Letters **2019**

<https://arxiv.org/pdf/1906.09125.pdf>

Ground-based Observations of the Solar Sources of Space Weather (Invited **Review**)

Astrid M. **Veronig**, Werner Pötzi

"Ground-based Solar Observations in the Space Instrumentation Era", Proceedings of the Coimbra Solar Physics Meeting 2015, ASP Conference Series, Eds. I. Dorotovic, C. Fischer, and M. Temmer; **2016**

<http://arxiv.org/pdf/1602.02721v1.pdf>

21 Feb. - A backside full halo CME was observed following a large filament eruption in the southern hemisphere. Слабые мягкие протоны.

Witnessing tether-cutting reconnection at the onset of a partial eruption

Hechao **Chen**, [Yadan Duan](#), [Jiayan Yang](#), [Bo Yang](#), [Jun Dai](#)

2018

<https://arxiv.org/pdf/1811.01606.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>

24 Feb - at approximately 11:00 UTC, NASA's Solar Dynamics Observatory recorded a spectacular eruption near the sun's southeastern limb. The blast was rooted on the backside of the sun, but some of the explosion's debris fell back to the sun on the frontside. Play the movie.

НАЧАЛЬНЫЕ СКОРОСТИ КОРОНАЛЬНЫХ ВЫБРОСОВ МАСС И ОСОБЕННОСТИ СОПРОВОЖДАЕМЫХ ВСПЫШЕК

[Дивлекеев](#) М.И.

Пулково «Солнечная и солнечно-земная физика – 2015» с.115

27 Feb

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>

2 March - 15:30: Departing AR2290 (N22W91) erupted, producing an impulsive M3.7 flare. CME

19:31: impulsive M4.1 flare

Observations of a prominence eruption and loop contraction

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

A&A 2021

<https://arxiv.org/pdf/2101.07682.pdf>

Observations of Excitation and Damping of Transversal Oscillations in Coronal Loops by AIA/SDO

A. [Abedini](#)

[Solar Physics](#) February 2018, 293:22

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1240-6.pdf>

3 March - 01:35: NW-limb impulsive M8 flare, S15~740, слабый II тип , CME, протонов нет

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>

3-17 March

Acceleration of Energetic Ions in Corotating Interaction Region near 1.5 au: Evidence from MAVEN.

[Thampi](#), S. V., Krishnaprasad, C., Shreedevi, P. R., Pant, T. K., & Bhardwaj, A.

(2019). The Astrophysical Journal, 880(1), L3.

sci-hub.se/10.3847/2041-8213/ab2b43

sci-hub.se/10.3847/2041-8213/ab2b43

4 Mar

Are the Magnetic Fields Radial in the Solar Polar Region?

[Xudong Sun](#), [Yang Liu](#), [Ivan Milić](#), [Ana Belén Griñón Marín](#)

RNAAS 2021

<https://arxiv.org/pdf/2106.01461.pdf>

5 March

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>

6-20 March – активность области 2297

Operational solar flare forecasting via video-based deep learning

[Sabrina Guastavino](#), [Francesco Marchetti](#), [Federico Benvenuto](#), [Cristina Campi](#), [Michele Piana](#)

Frontiers 2022

<https://arxiv.org/pdf/2209.05128.pdf>

6 March – 04:57: M3.0 E-limb flare; S5~260, partial halo CME
08:15: M1.5 LDE, E-limb flare continuation

7 March – 22:22: **M9.2** flare (S18E75), S5~260, II,IV, fast partial halo CME

GIC due to storm sudden commencement in low-latitude high-voltage power network in China: Observation and simulation

J. J. **Zhang**, C. Wang, T. R. Sun, C. M. Liu, K. R. Wang

Space Weather Volume 13, Issue 10 p/ 626-642 **2015**

<http://onlinelibrary.wiley.com/doi/10.1002/2015SW001263/full>

<http://onlinelibrary.wiley.com/doi/10.1002/2015SW001263/epdf>

7-8 Mar

**A Depression of Microwave Emission as a Response to the Appearance of a Jet
Kuzmenko, I. V.**

Geomagnetism and Aeronomy, Volume 63, Issue 7, p.1047-1053, **2023**

DOI: [10.1134/S0016793223070150](https://doi.org/10.1134/S0016793223070150)

Кузьменко И.В. Депрессия микроволнового излучения как отклик на возникновение джета
Сборник трудов XXVI Всероссийской ежегодной конференции по физике Солнца «Солнце и
солнечно-земная физика – 2022» ГАО РАН.

<http://www.gaoran.ru/russian/solphys/2022/book/conf2022.pdf>

**Non-thermal Broadening of IRIS Fe XXI Lines Caused by Turbulent Plasma Flows in the Magnetic
Reconnection Region During Solar Eruptions**

[Chengcai Shen](#), [Vanessa Polito](#), [Katharine K. Reeves](#), [Bin Chen](#), [Sijie Yu](#), [Xiaoyan Xie](#)

2022

<https://arxiv.org/pdf/2211.07428.pdf>

9 March – 14:33: M4.5/1N, S16E49

23:53: M5.8/2N, S18E45, S5~400, II, At least a partial halo CME

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>

Deep Flare Net (DeFN) model for solar flare prediction

[Naoto Nishizuka](#), [Komei Sugiura](#), [Yuki Kubo](#), [Mitsue Den](#), [Mamoru Ishii](#)

ApJ **2018**

<https://arxiv.org/pdf/1805.03421.pdf>

9-19 Mar

Operational solar flare forecasting via video-based deep learning

Sabrina **Guastavino**, Francesco Marchetti, Federico Benvenuto, Cristina Campi, and Michele Piana
Front. Astron. Space Sci. 9:1039805. **2023** doi: 10.3389/fspas.2022.1039805

<https://www.frontiersin.org/articles/10.3389/fspas.2022.1039805/pdf>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.1039805/full>

10 March – 03:24: M5.1/2B impulsive flare, S15E40, S15~2200, II(1)/IV(1), CME

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics

2024

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

Implications of Flat Optically Thick Microwave Spectra in Solar Flares for Source Size and Morphology

[Shaheda Begum Shaik](#), [Dale E. Gary](#)

ApJ 2021

<https://arxiv.org/pdf/2107.00192.pdf>

Microwave diagnostics of magnetic field strengths in solar flare loops

[Rui Zhu](#), [Baolin Tan](#), [Yingna Su](#), [Hui Tian](#), [Yu Xu](#), [Xingyao Chen](#), [Yongliang Song](#), [Guangyu Tan](#)

SCIENCE CHINA Technological Sciences 2020 Vol. 60 No. 1

<https://arxiv.org/pdf/2006.15014.pdf>

Locating Hot Plasma in Small Flares using Spectroscopic Overlappogram Data from the Hinode EUV Imaging Spectrometer

Louise [Harra](#), [Sarah Matthews](#), [David Long](#), [Takahiro Hasegawa](#)...

[Solar Physics](#) volume 295, Article number: 34 (2020)

<sci-hub.si/10.1007/s11207-020-01602-6>

A Circular White-Light Flare with Impulsive and Gradual White-Light Kernels

Q. [Hao](#), [K. Yang](#), [X. Cheng](#), [Y. Guo](#), [C. Fang](#), [M. D. Ding](#), [P. F. Chen](#), [Z. Li](#)

Nature Communications 2017

<https://arxiv.org/pdf/1712.07279.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>

10-12 March

Temporal Behaviors of Magnetic Helicity Injections by Self and Mutual Sunspot Rotations

Takahiro [Hasegawa](#)^{1,2} and Toshifumi Shimizu^{1,2}

2023 ApJ 943 96

<https://iopscience.iop.org/article/10.3847/1538-4357/aca800/pdf>

11 March – 00:02: M2.9/SF, S16E28, II(1)

07:18: M1.8/1B, S16E26, S9~190

>07:30: эрупция NW волокна, CME

07:57: M2.6

16:22: X2.1/2B quasi-impulsive flare, S17E21, S9~200, II(2)

~23:20: эрупция волокна рядом с AR 2297

Stability of the coronal magnetic field around large confined and eruptive solar flares

[Manu Gupta](#), [J. K. Thalmann](#), [A. M. Veronig](#)

A&A 2024

<https://arxiv.org/pdf/2402.12254.pdf>

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>

Identifying preflare spectral features using explainable artificial intelligence
[Brandon Panos](#), [Lucia Kleint](#), [Jonas Zbinden](#)
A&A 2023
<https://arxiv.org/pdf/2301.01560.pdf>

Unsupervised Machine Learning for the Identification of Pre-flare Spectroscopic Signatures
Magnus Woods (1,2), Alberto Sainz Dalda(1,2), Bart De Pontieu(2)
IRIS Nugget 2021-08-10 <https://iris.lmsal.com/nugget?cmd=view-pod&pubDate=2021-08-10>

Magnetic helicity and energy budget around large confined and eruptive solar flares
[Manu Gupta](#), [J. K. Thalmann](#), [A. M. Veronig](#)
A&A 2021
<https://arxiv.org/pdf/2106.08781.pdf>

The Magnetic Topology and Eruption Mechanism of a Multiple-ribbon Flare
[Ye Qiu](#), [Yang Guo](#), [M. D. Ding](#), [Ze Zhong](#)
ApJ 2020
<https://arxiv.org/pdf/2008.08866.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>

Solar Flare Prediction Using Magnetic Field Diagnostics Above the Photosphere
[M. B. Korsos](#), [M. K. Georgoulis](#), [N. Gyenge](#), [S. K. Bisoi](#), [S. Yu](#), [S. Poedts](#), [C. J. Nelson](#), [J. Liu](#), [Y. Yan](#), [R. Erdelyi](#)
2020
<https://arxiv.org/pdf/2005.12180.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>

A Study of Pre-Flare Solar Coronal Magnetic Fields: Magnetic Flux Ropes
Aiyng [Duan](#), [Chaowei Jiang](#), [Wen He](#), [Xueshang Feng](#), [Peng Zou](#), [Jun Cui](#)
ApJ 2019
<https://arxiv.org/pdf/1908.08643.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>

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>

Characteristics that Produce White-Light Enhancements in Solar Flares Observed by Hinode/SOT

Kyoko [Watanabe](#), [Jun Kitagawa](#), [Satoshi Masuda](#)

ApJ 2017

<https://arxiv.org/pdf/1710.09531.pdf>

An Explanation of Remarkable Emission-line Profiles in Post-flare Coronal Rain

Daniela A. [Lacatus](#)¹, Philip G. Judge², and Alina Donea

2017 ApJ 842 15

<http://sci-hub.cc/10.3847/1538-4357/aa725d>

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>

Slipping Magnetic Reconnection of Flux Rope Structures as a Precursor to an Eruptive X-class Solar Flare

Ting [Li](#), Kai Yang, Yijun Hou, Jun Zhang

ApJ 2016

<http://arxiv.org/pdf/1608.02057v1.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

Fine Structure in Flare Soft X-ray Light Curves

Brian [Dennis](#) and Kim Tolbert:

RHESSI Science Nuggets, No. 262, Sept 2015

http://sprg.ssl.berkeley.edu/~tohan/wiki/index.php/Fine_Structure_in_Flare_Soft_X-ray_Light_Curves

12 March

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>

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>

Circular ribbon flare triggered from an incomplete fan-spine configuration★

Prabir K. [Mitra](#)^{1,2}, Astrid M. Veronig^{1,3} and Bhuwan Joshi²

A&A 674, A154 (2023)

<https://www.aanda.org/articles/aa/pdf/2023/06/aa46103-23.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>

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>

Implications of Flat Optically Thick Microwave Spectra in Solar Flares for Source Size and Morphology

[Shaheda Begum Shaik](#), [Dale E. Gary](#)

ApJ 2021

<https://arxiv.org/pdf/2107.00192.pdf>

Flare Expansion to a Magnetic Rope Accompanied by Rare Radio Bursts

Alena [Zemanová](#), Marian Karlický, Jana Kašparová, and Jaroslav Dudík

2020 ApJ 905 111

<https://doi.org/10.3847/1538-4357/abc424>

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>

Statistical Analysis of Torus and Kink Instabilities in Solar Eruptions

Ju [Jing](#), [Chang Liu](#), [Jeongwoo Lee](#), [Hantao Ji](#), [Nian Liu](#), [Yan Xu](#), [Haimin Wang](#)

2018

<https://arxiv.org/pdf/1808.08924.pdf>

Multi-episode Chromospheric Evaporation Observed in a Solar Flare

H. [Tian](#)¹ and N.-H. Chen

2018 ApJ 856 34

[10.3847/1538-4357/aab15a](https://doi.org/10.3847/1538-4357/aab15a)

The Duration of Energy Deposition on Unresolved Flaring Loops in the Solar Corona

Jeffrey W. [Reep](#), [Vanessa Polito](#), [Harry P. Warren](#), [Nicholas A. Crump](#)

2018

<https://arxiv.org/pdf/1802.08884.pdf>

Multi-episode chromospheric evaporation observed in a solar flare

H. [Tian](#), [N.-H. Chen](#)

ApJ 2018

<https://arxiv.org/pdf/1801.04370.pdf>

OBSERVATION AND ANALYSIS OF BALLISTIC DOWNFLOWS IN AN M-CLASS FLARE WITH THE INTERFACE REGION IMAGING SPECTROGRAPH

Sean R. [Brannon](#)

2016 ApJ 833 101 DOI 10.3847/1538-4357/833/1/101

Global sausage oscillation of solar flare loops detected by the Interface Region Imaging Spectrograph

Hui [Tian](#), Peter R. Young, Katharine K. Reeves, [Tongjiang Wang](#), [Patrick Antolin](#), [Bin Chen](#), [Jiansen He](#)

ApJL 2016

13 March

Locating Hot Plasma in Small Flares using Spectroscopic Overlappogram Data from the Hinode EUV Imaging Spectrometer

Louise [Harra](#), [Sarah Matthews](#), [David Long](#), [Takahiro Hasegawa](#)...

[Solar Physics](#) volume 295, Article number: 34 (2020)

sci-hub.si/10.1007/s11207-020-01602-6

13-21 Mar

Wavelet Analysis of Forbush Decreases at High-Latitude Stations During Geomagnetic Disturbances

Roshan Kumar [Mishra](#), [Ashok Silwal](#), [Rabin Baral](#), [Binod Adhikari](#), [Carlos Roberto Braga](#), [Sujan Prasad Gautam](#), [Priyanka Kumari Das](#) & [Yenca Migoya-Orue](#)

[Solar Physics](#) volume 297, Article number: 26 (2022)

<https://link.springer.com/content/pdf/10.1007/s11207-022-01948-z.pdf>

14-15 Mar

Study of the excitation of large-amplitude oscillations in a prominence by nearby flares

Manuel [Luna](#)^{1,2*}, Reetika Joshi^{3,4}, Brigitte Schmieder^{5,6,7}, Fernando Moreno-Insertis^{8,9}, Valeriia Liakh⁶ and Jaume Terradas^{1,2}

A&A, 691, A354 (2024)

<https://www.aanda.org/articles/aa/pdf/2024/11/aa50869-24.pdf>

<https://arxiv.org/pdf/2410.10223>

Study of Solar Jets and Related Flares

Thesis

[Reetika Joshi](#)

Thesis 2022

<https://arxiv.org/pdf/2206.02478.pdf>

15 March – 02:13: **эрупция волокна** + C9.1/1F LDE, S22W25, AR 2297, II(2), IV, гало CME, небольшие мягкие протоны

23:22: M1.2, ~LDE, небольшая добавка к протонам

Quasiperiodic Oscillations of Flare Loops and Slipping Motion of Ribbon Substructures during a C-class Flare

Yining [Zhang](#)^{1,2}, Ting Li^{1,2,3}, and Jing Ye^{4,5,6}

2024 ApJ 972 122

<https://iopscience.iop.org/article/10.3847/1538-4357/ad5e69/pdf>

<https://arxiv.org/pdf/2407.03639>

Automatic detection technique for solar filament oscillations in GONG data

M. [Luna](#)^{1,2}, J. R. Mérou Mestre^{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>

Mechanism of the Failed Eruption of an Intermediate Solar Filament

[Zou Peng](#)¹, [Jiang Chaowei](#)¹, [Wang Juntao](#)¹, and [Bian Xinkai](#)¹

2022 ApJ 928 160

<https://iopscience.iop.org/article/10.3847/1538-4357/ac581f/pdf>

Modeling a Coronal Mass Ejection as a Magnetized Structure with EUHFORIA

G. [Sindhuja](#)¹, [Jagdev Singh](#)¹, [E. Asvestari](#)², and [B. Raghavendra Prasad](#)¹

2022 ApJ 925 25

<https://iopscience.iop.org/article/10.3847/1538-4357/ac3bd2/pdf>

Flare Energy Release at the Magnetic Field Polarity Inversion Line During M1.2 Solar Flare of 2015 March 15.

II. Investigation of Photospheric Electric Current and Magnetic Field Variations Using HMI 135-second Vector Magnetograms

I.N. [Sharykin](#), I.V. [Zimovets](#), I.I. [Myshyakov](#)

2020 *ApJ* 893 159

<https://arxiv.org/pdf/1905.03352.pdf>

<https://doi.org/10.3847/1538-4357/ab84ef>

Evolution of Coronal and Interplanetary Shock Waves Inferred from a Radio Burst

Khaled [Alielden](#)

Solar Physics October 2019, 294:159

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1493-8.pdf>

The Role of a Tiny Brightening in a Huge Geo-effective Solar Eruption Leading to the St Patrick's Day Storm

Yumi [Bamba](#), [Satoshi Inoue](#), [Keiji Hayashi](#)

ApJ 2019

<https://arxiv.org/pdf/1902.04871.pdf>

Flare Energy Release in the Magnetic Field Polarity Inversion Line During M1.2 Solar Flare of March 15, 2015. Paper I. Onset of Plasma Heating and Electrons Acceleration

I.N. [Sharykin](#), I.V. [Zimovets](#), I.I. [Myshyakov](#), N.S. [Meshalkina](#)

2018 *ApJ* 864 156

<https://arxiv.org/pdf/1805.05792.pdf>

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David [Webb](#), Nariaki Nitta

Solar Physics October 2017, 292:142 File

Observations of apparent superslow wave propagation in solar prominences

J.O. [Raes](#), T. Van Doorselaere, M. Baes, [A.N. Wright](#)

A&a 2017

<https://arxiv.org/pdf/1706.04340.pdf>

Two Step Filament Eruption During 14-15 March 2015

R. [Chandra](#), B. Filippov, R. Joshi, B. Schmieder

Solar Phys. 2017

<https://arxiv.org/pdf/1704.08860.pdf>

Sympathetic Solar Filament Eruptions

Rui [Wang](#), Ying D. Liu, Ivan Zimovets, Huidong Hu, Xinghua Dai, Zhongwei Yang

2016

<http://arxiv.org/pdf/1608.01067v1.pdf>

On the Propagation of a Geoeffective Coronal Mass Ejection during March 15 -- 17, 2015

Yuming [Wang](#), Quanhao Zhang, Jiajia Liu, [Chenglong Shen](#), [Fang Shen](#), [Zicai Yang](#), [T. Zic](#), [B. Vrsnak](#), [D. F. Webb](#), [Rui Liu](#), [S. Wang](#), [Jie Zhang](#), [Qiang Hu](#), [Bin Zhuang](#)

JGR Volume 121, Issue 8, pp. 7423-7434 2016

<http://arxiv.org/pdf/1607.07750v1.pdf> File

15-17 March

Precursory Signs of Large Forbush Decreases

M. [Papailiou](#), [M. Abunina](#), [H. Mavromichalaki](#), [A. Belov](#), [A. Abunin](#), [E. Eroshenko](#) & [V. Yanke](#)
[Solar Physics](#) volume 296, Article number: 100 (2021)
<https://link.springer.com/content/pdf/10.1007/s11207-021-01844-y.pdf>
<https://doi.org/10.1007/s11207-021-01844-y>

Acceleration of Energetic Ions in Corotating Interaction Region near 1.5 au: Evidence from MAVEN.

[Thampi](#), S. V., Krishnaprasad, C., Shreedevi, P. R., Pant, T. K., & Bhardwaj, A.
(2019). *The Astrophysical Journal*, 880(1), L3.
sci-hub.se/10.3847/2041-8213/ab2b43
sci-hub.se/10.3847/2041-8213/ab2b43

On the Propagation of a Geoeffective Coronal Mass Ejection during March 15 -- 17, 2015

Yuming [Wang](#), Quanhao Zhang, Jiajia Liu, [Chenglong Shen](#), [Fang Shen](#), [Zicai Yang](#), [T. Zic](#), [B. Vrsnak](#), [D. F. Webb](#), [Rui Liu](#), [S. Wang](#), [Jie Zhang](#), [Qiang Hu](#), [Bin Zhuang](#)
JGR Volume 121, Issue 8, pp. 7423-7434 2016
<http://arxiv.org/pdf/1607.07750v1.pdf> File

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>

Magnetic Clouds: Solar Cycle Dependence, Sources, and Geomagnetic Impacts

Y. [Li](#), [J. G. Luhmann](#), [B. J. Lynch](#)
Solar Phys. 2018
<https://arxiv.org/ftp/arxiv/papers/1808/1808.04078.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

16 March – 10:58, M1.6/2N, S17W39
20:49: C8.1/1N, S22W48, S15~100

17 March - a CME hit Earth's magnetic field on March 17th at approximately 04:30,
**The strongest geomagnetic storm of the current solar cycle Dst~-221 , значительный
форбуш,**

While the geomagnetic disturbance during the first half of the day was likely related to a recurrent co-rotating interaction region, the very strong disturbance after noon was likely a combination of the CIR and the arrival of the March 15 CME.

23:34: M1.0/2N, S21W56, AR 12297, S5~120, II(2)

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

Double Superposed Epoch Analysis of Geomagnetic Storms and Corresponding Solar Wind and IMF in Solar Cycles 23 and 24

V. [Manu](#), [N. Balan](#), [Qing-He Zhang](#), [Zan-Yang Xing](#)

Space Weather [Volume21, Issue3](#) e2022SW003314 **2023**

<https://doi.org/10.1029/2022SW003314>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2022SW003314>

Global geomagnetic perturbation forecasting using Deep Learning

[Vishal Upendran](#), [Panagiotis Tigas](#), [Banafsheh Ferdousi](#), [Teo Bloch](#), [Mark C. M. Cheung](#), [Siddha Ganju](#), [Asti Bhatt](#), [Ryan M. McGranaghan](#), [Yarin Gal](#)

Space Weather **2022**

<https://arxiv.org/pdf/2205.12734.pdf>

Comparison of Deep Learning Techniques to Model Connections Between Solar Wind and Ground Magnetic Perturbations

[Amy M. Keese](#)^{1*}, [Victor Pinto](#)¹, [Michael Coughlan](#)¹, [Connor Lennox](#)², [Md Shaad Mahmud](#)² and [Hyunju K. Connor](#)³

Front. Astron. Space Sci., 06 October **2020** |

<https://doi.org/10.3389/fspas.2020.550874>

<https://www.frontiersin.org/articles/10.3389/fspas.2020.550874/full>

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>

Solar Activities and Its Impact on Space Weather

[Pandit](#), Drabindra; [Chapagain](#), Narayan P.; [Adhikari](#), Binod; [Mishra](#), Roshan K.

Long-term Datasets for the Understanding of Solar and Stellar Magnetic Cycles, Proceedings of the International Astronomical Union, IAU Symposium, Volume 340, pp. 149-150, **2018**

sci-hub.se/10.1017/S1743921318001606

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

Review

Robert J. [Redmon](#)*[William F. Denig](#)*[Paul T. M. Loto'aniu](#)*[Dominic Fuller-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>

Chapter 11 - Empirical Modeling of Extreme Events: Storm-Time Geomagnetic Field, Electric Current, and Pressure Distributions

Review

Mikhail I. [Sitnov](#)*[Grant K. Stephens](#)*[Matina Gkioulidou](#)*[Viacheslav Merkin](#)*[Aleksandr Y. Ukhorskiy](#)*[Haje Korth](#)*[Pontus C. Brandt](#)*[Nikolai A. Tsyganenko](#)†

In: [Extreme Events in Geospace](#) Origins, Predictability, and Consequences **2018**, Pages 259-279

<http://sci-hub.tw/10.1016/B978-0-12-812700-1.00011-X>

Chapter 8 - An Overview of Science Challenges Pertaining to Our Understanding of Extreme Geomagnetically Induced Currents

Chigomezoyo M. [Ngwira](#)*[Antti A. Pulkkinen](#)†

In: [Extreme Events in Geospace](#) Origins, Predictability, and Consequences **2018**, Pages 187-208

<http://sci-hub.tw/10.1016/B978-0-12-812700-1.00008-X>

Magnetic Clouds: Solar Cycle Dependence, Sources, and Geomagnetic Impacts

Y. [Li](#), J. G. Luhmann, B. J. Lynch

[Solar Physics](#) October **2018**, 293:135

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1356-8.pdf>

Space Weather Effects in the Earth's Radiation Belts

Review

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

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

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

Study of the Geoeffectiveness and Galactic Cosmic-Ray Response of VarSITI-ISEST Campaign Events in Solar Cycle 24

O. P. M. [Aslam](#), Badruddin

[Solar Physics](#) September 2017, 292:135

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>

Analysis of the monitoring data of geomagnetic storm interference in the electrification system of a high-speed railway

Lianguang [Liu](#), Xiaoning Ge, Wei Zong, You Zhou,

Space Weather Volume 14, Issue 10 October 2016 Pages 754–763

<http://sci-hub.cc/doi/10.1002/2016SW001411>

On the Propagation of a Geoeffective Coronal Mass Ejection during March 15 -- 17, 2015

Yuming [Wang](#), Quanhao Zhang, Jiajia Liu, [Chenglong Shen](#), [Fang Shen](#), [Zicai Yang](#), [T. Zic](#), [B. Vrsnak](#), [D. F. Webb](#), [Rui Liu](#), [S. Wang](#), [Jie Zhang](#), [Qiang Hu](#), [Bin Zhuang](#)

JGR 2016

<http://arxiv.org/pdf/1607.07750v1.pdf> File

Overview of the 2015 St. Patrick's day storm and its consequences for RTK and PPP positioning in Norway

Knut Stanley [Jacobsen](#) and Yngvild Linnea Andalsvik

J. Space Weather Space Clim., 6, A9 (2016)

<http://www.swsc-journal.org/articles/swsc/pdf/2016/01/swsc150065.pdf>

Properties and Geoeffectiveness of Magnetic Clouds during Solar Cycles 23 and 24†

N. [Gopalswamy](#), S. Yashiro^{1,2}, H. Xie^{1,2}, S. Akiyama^{1,2} and P. Mäkelä

JGR 2015

<http://arxiv.org/pdf/1510.00906v1.pdf>

The Mild Space Weather in Solar Cycle 24

Nat [Gopalswamy](#), [Sachiko Akiyama](#), [Seiji Yashiro](#), [Hong Xie](#), [Pertti Makela](#), [Grzegorz Michalek](#)

Proc. 14th International Ionospheric Effects Symposium on 'Bridging the gap between applications and research involving ionospheric and space weather disciplines' May 12-14, 2015, Alexandria, VA

<http://arxiv.org/ftp/arxiv/papers/1508/1508.01603.pdf>

Plasma and Magnetic Field Characteristics of Solar Coronal Mass Ejections in Relation to Geomagnetic Storm Intensity and Variability

Ying D. [Liu](#), [Huidong Hu](#), [Rui Wang](#), [Zhongwei Yang](#), [Bei Zhu](#), [Yi A. Liu](#), [Janet G. Luhmann](#), [John D. Richardson](#)

ApJL 2015

<http://arxiv.org/pdf/1508.01267v1.pdf>

No Major Solar Flares but the Largest Geomagnetic Storm in the Present Solar Cycle

Y. [Kamide](#), K. Kusano

Pileup accident hypothesis of magnetic storm on 17 March 2015

Kataoka, Ryuho ; [Shiota, Daikou](#) ; [Kilpua, Emilia](#) ; [Keika, Kunihiro](#)
Geophysical Research Letters, Volume 42, Issue 13, pp. 5155-5161, 2015
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2015GL064816>

17-18 Mar

Measurements and Simulations of the Geomagnetically Induced Currents in Low-latitude Power Networks During Geomagnetic Storms

[J. J. Zhang](#) , [Y. Q. Yu](#) , [C. Wang](#), [D. Du](#) , [D. Wei](#) , [L. G. Liu](#)
Space Weather **Volume18, Issue8** e2020SW002549 2020
<https://doi.org/10.1029/2020SW002549>
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002549>

17-20 Mar

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

[R. L. Walterscheid](#), [M. W. Chen](#), [C.-C. Chao](#), [S. Gegenheimer](#), [J. Cabrera-Guzman](#), [J. McVey](#)
Space Weather e2022SW003332 **Volume21, Issue5** 2023
<https://doi.org/10.1029/2022SW003332>
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2022SW003332>

18 March – Несколько С вспышек, без микроволн и без протонов

19-20 March

Coronal Mini-jets in an Activated Solar Tornado-like Prominence

[Huadong Chen](#), [Jun Zhang](#), [Bart De Pontieu](#), [Suli Ma](#), [Bernhard Kliem](#), [Eric Priest](#)
ApJ 2020
<https://arxiv.org/pdf/2006.08252.pdf>

Solar Tornadoes Triggered by Interaction between Filaments and EUV Jets

[Huadong Chen](#)¹, [Jun Zhang](#)¹, [Suli Ma](#)^{1,2}, [Xiaoli Yan](#)³, and [Jianchao Xue](#)
2017 ApJL 841 L13
<https://iopscience.iop.org/article/10.3847/2041-8213/aa71a2/pdf>

20 March Затмение

Self-consistent propagation of flux ropes in realistic coronal simulations

[L. Linan](#), [F. Regnault](#), [B. Perri](#), [M. Brchneleva](#), [B. Kuzma](#), [A. Lani](#), [S. Poedts](#), [B. Schmieder](#)
A&A 2023
<https://arxiv.org/pdf/2305.02089.pdf>

COCONUT, a Novel Fast-converging MHD Model for Solar Corona Simulations. III. Impact of the Preprocessing of the Magnetic Map on the Modeling of the Solar Cycle Activity and Comparison with Observations

[Błażej Kuźma](#)¹, [Michaela Brchneleva](#)¹, [Barbara Perri](#)¹, [Tinatin Baratashvili](#)¹, [Fan Zhang](#)¹, [Andrea Lani](#)¹, and [Stefaan Poedts](#)^{1,2}
2023 ApJ 942 31
<https://iopscience.iop.org/article/10.3847/1538-4357/aca483/pdf>

A Comparison of Global Magnetofrictional Simulations of the 2015 March 20 Solar Eclipse

Duncan H. [Mackay](#)¹ and L. A. Upton²

2022 ApJ 939 9

<https://iopscience.iop.org/article/10.3847/1538-4357/ac94c7/pdf>

LOFAR imaging of the solar corona during the 2015 March 20 solar eclipse

[A. M. Ryan](#), [P. T. Gallagher](#), [E. P. Carley](#), [M. A. Brentjens](#), [P. C. Murphy](#), [C. Vocks](#), [D. E. Morosan](#), [H. Reid](#), [J. Magdalenic](#), [F. Breitling](#), [P. Zucca](#), [R. Fallows](#), [G. Mann](#), [A. Kerdraon](#), [R. Halfwerk](#)

A&A 2021

<https://arxiv.org/pdf/2102.05552.pdf>

Magnetic Imaging of the Outer Solar Atmosphere (MImOSA): Unlocking the driver of the dynamics in the upper solar atmosphere Review

[H. Peter](#), [E. Alsina Ballester](#), [V. Andretta](#), [F. Auchere](#), [L. Belluzzi](#), [A. Bemporad](#), [D. Berghmans](#), [E. Buchlin](#), [A. Calcines](#), [L.P. Chitta](#), [K. Dalmasse](#), [T. del Pino Aleman](#), [A. Feller](#), [C. Froment](#), [R. Harrison](#), [M. Janvier](#), [S. Matthews](#), [S. Parenti](#), [D. Przybylski](#), [S.K. Solanki](#), [J. Stepan](#), [L. Teriaca](#), [J. Trujillo Bueno](#)

Experimental Astronomy (on 28. Jul. 2020). 2021

Based on a proposal submitted in response to a call for white papers in the Voyage 2050 long-term plan in the ESA science programme.

<https://arxiv.org/pdf/2101.01566.pdf>

Solar survey at Pic du Midi: Calibrated data and improved images

Laurent [Koechlin](#)¹, Luc Dettwiller², Maurice Audejean³, Maël Valais¹ and Arturo López Ariste¹

A&A 631, A55 (2019)

sci-hub.se/10.1051/0004-6361/201732504

Chromospheric and Coronal Radio Sources from Observations of the Partial Solar Eclipse of March 20, 2015, at the Mountain Astronomical Station of the Central Astronomical Observatory

A. D. [Shramko](#) and S. A. Guseva

Geomagn. and Aeronomy 58 4 464-468 2018

Geomagnetizm i Aeronomiya, 2018, Vol. 58, No. 4, pp. 479–483.

<http://sci-hub.tw/https://link.springer.com/article/10.1134/S0016793218040163>

Global Non-Potential Magnetic Models of the Solar Corona During the March 2015 Eclipse

A. R. [Yeates](#), [T. Amari](#), [I. Contopoulos](#), [X. Feng](#), [D. H. Mackay](#), [Z. Mikić](#), [T. Wiegmann](#), [J. Hutton](#), [C. A. Lowder](#), [H. Morgan](#), [G. Petrie](#), [L. A. Rachmeler](#), [L. A. Upton](#), [A. Canou](#), [P. Chopin](#), [C. Downs](#), [M. Druckmüller](#), [J. A. Linker](#), [D. B. Seaton](#), [T. Török](#)

Space Science Reviews 2018

<https://arxiv.org/pdf/1808.00785.pdf>

First Empirical Determination of the Fe 10+ and Fe 13+ Freeze-in Distances in the Solar Corona

[Benjamin Boe](#), [Shadia Habbal](#), [Miloslav Druckmuller](#), [Enrico Landi](#), [Ehsan Kourkchi](#), [Adalbert Ding](#), [Pavel Starha](#), [Joseph Hutton](#)

2018

<https://arxiv.org/pdf/1805.03211.pdf>

ХРОМОСФЕРНЫЕ И КОРОНАЛЬНЫЕ ИСТОЧНИКИ В РАДИОДИАПАЗОНЕ ПО ЧАСТНОМУ СОЛНЕЧНОМУ ЗАТМЕНИЮ 20.03.2015 НА ГАС ГАО РАН

[Шрамко](#) А.Д., Гусева С.А.

Пулково «Солнечная и солнечно-земная физика – 2015», с.387

The analysis of the observant data of a partial solar eclipse from 3/20/2015 on the data from radio telescopes RT-2 ($\lambda 3.2$ cm) and RT-3 ($\lambda 4.9$ cm).

НАБЛЮДЕНИЯ СОЛНЕЧНОГО ЗАТМЕНИЯ 20.03.2015 г. НА ДВУХ РАДИОТЕЛЕСКОПАХ РТ-32 В ОБСЕРВАТОРИЯХ «СВЕТЛОЕ» И «ЗЕЛЕНЧУКСКАЯ» (предварительные результаты)

Рахимов И.А.1, Дьяков А.А.1, Ипатов А.В.1, Ильин Г.Н.1, Коржавин А.Н.2, Петерова Н.Г.2, Топчило Н.А.
Пулково *«Солнечная и солнечно-земная физика – 2015»*, с.313

СПЕКТРАЛЬНО-ПОЛЯРИЗАЦИОННЫЕ НАБЛЮДЕНИЯ СОЛНЕЧНОГО ЗАТМЕНИЯ 20.03.2015 г. НА РАДИОТЕЛЕСКОПАХ РАТАН-600 И БПР (ДИНАМИКА И ХАРАКТЕРИСТИКИ АКТИВНЫХ ОБЛАСТЕЙ)

Курочкин Е.А.1, Богод В.М.1, Венгер А.П.1, Коржавин А.Н.1, Петерова Н.Г.1, Стороженко А.А.1, Топчило Н.А.2, Шендрик А.В.1
Пулково *«Солнечная и солнечно-земная физика – 2015»*, с.257

First Detection of Prominence Material Embedded within a 2×10^6 K CME Front Streaming away at 100–1500 km s⁻¹ in the Solar Corona

Adalbert **Ding**^{1,2} and Shadia Rifai Habbal
2017 ApJL 842 L7

<http://iopscience.iop.org/sci-hub.cc/2041-8205/842/1/L7/>

Radial velocity observations of the 2015 Mar 20 eclipse - A benchmark Rossiter-McLaughlin curve with zero free parameters

Ansgar **Reiners**, Ulrike Lemke, Florian Bauer, [Benjamin Beeck](#), [Philipp Huke](#)
A&A 2016

<http://arxiv.org/pdf/1609.00535v1.pdf>

КОРОНА ВО ВРЕМЯ ПОЛНОГО СОЛНЕЧНОГО ЗАТМЕНИЯ 20 МАРТА 2015 Г. И РАЗВИТИЕ 24-ГО ЦИКЛА

ЯЗЕВ С.А.1,2, **МОРДВИНОВ** А.В.2, [ДВОРКИНА-САМАРСКАЯ А.А.](#)1

СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том: 2 Номер: 2 Год: 2016 Страницы: 3-11

21 March

Ubiquitous and Continuous Propagating Disturbances in the Solar Corona

Huw **Morgan** and Joseph Hutton

2018 ApJ 853 145

<http://sci-hub.tw/http://iopscience.iop.org/0004-637X/853/2/145/>

22 March

Photometric analysis of the corona during the 20 March 2015 total solar eclipse: density structures, hydrostatic temperatures and magnetic field inference

C. **Bazin**, J. Vilinga, R. Wittich, S. Koutchmy, J. Mouette, C. Nitschelm

Proceedings of the SF2A meeting, June 2015

<http://arxiv.org/pdf/1510.06436v1.pdf>

23 March

A reexamination of a filament oscillation event on 2013 March 15

Jialin **Chen**, Wenbin Xie, Yuhao Zhou, Kai Yang, Yu Ouyang, P. F. Chen

[Astrophysics and Space Science](#) September 2017, 362:165

24 March – For the 6th day in a row, a high-speed solar wind stream is buffeting Earth's magnetic field initiating intermittent geomagnetic storming under the influence of several CMEs and a high speed stream from CHs, including CH660

-- >08 UT: крупный западный CME (залимб?), Небольшие протоны

27 March

Solar survey at Pic du Midi: Calibrated data and improved images

Laurent [Koechlin](#)¹, Luc Dettwiller², Maurice Audejean³, Maël Valais¹ and Arturo López Ariste¹
A&A 631, A55 (2019)

sci-hub.se/10.1051/0004-6361/201732504

29 March - ~18 UT: крупный восточный CME

31 March – 1 Apr – **заметный кратковременный форбуш**; It was caused by a minor interplanetary shock wave that swept past Earth on March 31st; the shock wave's impact was weak and did not even spark a geomagnetic storm. Возмущение с сильным (~ 10 nT) северным Bz

3 April

Evidence for coherent spicule oscillations by correcting Hinode/SOT Ca II H in the southeast limb of the Sun

Alireza Ahangarzadeh [Maralani](#), Ehsan Tavabi, Ali Ajabshirizadeh

Mon. Not. R. Astron. Soc. **2017**

<https://arxiv.org/pdf/1702.01344.pdf>

4 April - 22:00-23:00: SE **filament** of magnetism stretching halfway across the sun **erupted**. C3.8 (LDE) peaked 00:07, partial halo **CME**

6 April

[Analysis of an Interplanetary Coronal Mass Ejection by a Spacecraft Radio Signal: A Case Study](#)

G. Molera [Calvés](#), E. Kallio, G. Cimo, J. Quick, D. A. Duev, T. Bocanegra Bahamón, M. Nickola, M. A. Kharinov, A. G. Mikhailov

Space Weather 16 November **2017** Vol: 15, Pages: 1523–1534

<http://sci-hub.tw/10.1002/2017SW001701>

8 Apr

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>

9 Apr

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

9-10 April - A weak disturbance, probably related to a low speed stream from CH661, began early on 9 Apr.

A G2 **geomagnetic storm (Dst~-43)** took place on 10 April, **as the result of a CME observed leaving the Sun late on 06 April. Форбуш.**

11 April - **geomagnetic storm (Dst~-73)**

Observations of Solar Coronal Rain in Null Point Topologies

E. I. **Mason**¹, Spiro K. Antiochos², and Nicholeen M. Viall

2019 ApJL 874 L33

sci-hub.se/10.3847/2041-8213/ab0c5d

14 April - an unstable **filament** of magnetism rose up and erupted from the sun's eastern limb.

14-15 April - **geomagnetic storm** (Dst~-41 and 56 nT) from a co-rotating interaction region and an extension of the southern polar coronal hole. Solar wind speed at SOHO ranged between 309 and 695 km/s.

16 April

The frequency ratio and time delay of solar radio emissions with fundamental and harmonic components

[Xingyao Chen](#), [Eduard P. Kontar](#), [Daniel L. Clarkson](#), [Nicolina Chrysaphi](#)

MNRAS **520**, Issue 2, 3117–3126 **2023**

<https://arxiv.org/pdf/2301.11299.pdf>

<https://doi.org/10.1093/mnras/stad325>

<https://academic.oup.com/mnras/article-pdf/520/2/3117/50319010/stad325.pdf>

<https://watermark.silverchair.com/stad325.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

Sizes and shapes of sources in solar metric radio bursts

[M. Gordovskyy](#), [E.P. Kontar](#), [D.L. Clarkson](#), [N. Chrysaphi](#), [P.K. Browning](#)

ApJ **2021**

<https://arxiv.org/pdf/2111.07777.pdf>

Fine structures of solar radio bursts: origins and radio-wave propagation effects

[Nicolina Chrysaphi](#)

PhD **Thesis**, University of Glasgow, **2021**.

<https://arxiv.org/pdf/2103.13745.pdf>

Fine structure of type III solar radio bursts from Langmuir wave motion in turbulent plasma

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

2021

<https://arxiv.org/pdf/2103.08424.pdf>

Detection of Energy Cutoffs in Flare-accelerated Electrons

Fanxiaoyu **Xia**^{1,2}, Yang Su^{1,2}, Wen Wang³, Linghua Wang³, Alexander Warmuth⁴, Weiqun Gan^{1,2}, and Youping Li^{1,2}

2021 ApJ 908 111

<https://iopscience.iop.org/article/10.3847/1538-4357/abce5c/pdf>

Observations of Solar Coronal Rain in Null Point Topologies

E. I. **Mason**¹, Spiro K. Antiochos², and Nicholeen M. Viall

2019 ApJL 874 L33

sci-hub.se/10.3847/2041-8213/ab0c5d

LOFAR observations of fine spectral structure dynamics in type IIIb radio bursts

I.N. [Sharykin](#), [E.P. Kontar](#), [A.A. Kuznetsov](#)

Solar Phys. **2018**

<https://arxiv.org/pdf/1806.01046.pdf>

The origin of the modulation of the radio emission from the solar corona by a fast magnetoacoustic wave

Dmitrii Y. [Kolotkov](#),¹ Valery M. Nakariakov,^{1, 2} and Eduard P. Kontar³

2018

https://warwick.ac.uk/fac/sci/physics/research/cfsa/people/kolotkov/eprints/lofar_fast_r1.pdf

Fine Structures of Solar Radio Type III Bursts and their Possible Relationship with Coronal Density Turbulence

Xingyao [Chen](#), [Eduard P. Kontar](#), [Sijie Yu](#), [Yihua Yan](#), [Jing Huang](#), [Baolin Tan](#)

ApJ **2018**

<https://arxiv.org/pdf/1801.07545.pdf>

Imaging Spectroscopy of Solar Radio Burst Fine Structures

E. P. [Kontar](#), [S. Yu](#), [A. A. Kuznetsov](#), [A. G. Emslie](#), [B. Alcock](#), [N. L. S. Jeffrey](#), [V. N. Melnik](#), [N. H. Bian](#), [P. Subramanian](#)

2017

<https://arxiv.org/pdf/1708.06505.pdf>

17 April - An emerging flux region (EFR)

Temporal evolution of arch filaments as seen in He I 10 830 Å★

S. J. González [Manrique](#)^{1,2,3}, C. Kuckein², M. Collados⁴, C. Denker², S. K. Solanki^{5,6}, P. Gömöry¹, M. Verma², H. Balthasar², A. Lagg⁵ and A. Diercke

A&A 617, A55 (2018)

<http://sci-hub.tw/https://www.aanda.org/articles/aa/abs/2018/09/aa32684-18/aa32684-18.html>

<https://arxiv.org/pdf/1807.00728.pdf>

Flows along arch filaments observed in the GRIS 'very fast spectroscopic mode'

S. J. González [Manrique](#), C. Denker, C. Kuckein, A. Pastor Yabar, M. Collados, M. Verma, H. Balthasar, A. Diercke, C. E. Fischer, P. Gömöry, N. Bello González, R. Schlichenmaier, M. Cubas Armas, T. Berkefeld, A. Feller, S. Hoch, A. Hofmann, A. Lagg, H. Nicklas, D. Orozco Suárez, 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

Conference proceedings of the IAUS 327: "Fine Structure and Dynamics of the Solar Atmosphere" **2017**

Fitting peculiar spectral profiles in He I 10830 Å absorption features

S. J. González [Manrique](#), C. Kuckein, A. Pastor Yabar, M. Collados C. Denker, C. E. Fischer, P. Gömöry, ...
Astron. Nachr. as a part of special edition of the 12th Potsdam Thinkshop, **2016**

<http://arxiv.org/pdf/1603.00679v1.pdf>

18 April - a magnetic **filament** attached to sunspot group AR2321 **erupted**, producing a C5-class solar flare. Сначала эруптировало удалённое NW волокно и вызвало указанную выше эрупцию.

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

Forward Modeling of a Pseudostreamer

Nishu [Karna](#)¹, Antonia Savcheva¹, Kévin Dalmasse², Sarah Gibson³, Svetlin Tassev¹

2019 ApJ 883 74

<https://doi.org/10.3847/1538-4357/ab3c50>

19 Apr

Magnetofrictional Modeling of an Erupting Pseudostreamer

Nishu [Karna](#)¹, Antonia Savcheva^{1,2}, Sarah Gibson³, Svetlin Tassev¹, Katharine K. Reeves¹, Edward E. DeLuca¹, and Kévin Dalmasse⁴

2021 ApJ 913 47

<https://doi.org/10.3847/1538-4357/abf2b8>

19-21 Apr

A Model for Flux Rope Formation and Disconnection in Pseudostreamer Coronal Mass Ejections

[P. F. Wyper](#), [B. J. Lynch](#), [C. R. DeVore](#), [P. Kumar](#), [S. K. Antiochos](#), [L. K. S. Daldorff](#)

ApJ 2024

<https://arxiv.org/pdf/2409.08126>

20 Apr

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

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

From Pseudostreamer Jets to CMEs: Observations of the Breakout Continuum

[Pankaj Kumar](#), [Judith T. Karpen](#), [Spiro K. Antiochos](#), [Peter F. Wyper](#), [C. Richard DeVore](#), [Benjamin J. Lynch](#)

ApJ 2020

<https://arxiv.org/pdf/2011.07029.pdf> File

21 Apr

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

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

Implications of Flat Optically Thick Microwave Spectra in Solar Flares for Source Size and Morphology

[Shaheda Begum Shaik](#), [Dale E. Gary](#)

ApJ 2021

<https://arxiv.org/pdf/2107.00192.pdf>

From Pseudostreamer Jets to CMEs: Observations of the Breakout Continuum

[Pankaj Kumar](#), [Judith T. Karpen](#), [Spiro K. Antiochos](#), [Peter F. Wyper](#), [C. Richard DeVore](#), [Benjamin J. Lynch](#)

ApJ 2020

<https://arxiv.org/pdf/2011.07029.pdf> File

Analysis of a Limb Eruptive Event

P. [Kotr̃c](#)¹, Yu. A. Kupryakov^{1,2}, M. Barta¹, L. K. Kashapova³ and W. Liu¹

Ground-based Solar Observations in the Space Instrumentation Era

ASP Conference Series, Vol. 504, p. 51, 2016

<http://aspbooks.org/publications/504/051.pdf>

22 Apr

X-ray/Radio Quasi-periodic Pulsations Associated with Plasmoids in Solar Flare Current Sheets

[Pankaj Kumar](#), [Judith T. Karpen](#), [Joel T. Dahlin](#)

ApJ 2024

<https://arxiv.org/pdf/2412.05193>

23 April

Comparison of damping models for kink oscillations of coronal loops

Yu **Zhong**,¹ Dmitrii Y. Kolotkov, ^{1,2} Sihui Zhong ¹ and Valery M. Nakariakov

Monthly Notices of the Royal Astronomical Society, Volume 525, Issue 4, 2023, Pages 5033–5040,

<https://doi.org/10.1093/mnras/stad2598>

<https://watermark.silverchair.com/stad2598.pdf>

https://warwick.ac.uk/fac/sci/physics/research/cfsa/people/valery/zhong_y_23.pdf

OSCILLATION OF CURRENT SHEETS IN THE WAKE OF A FLUX ROPE ERUPTION OBSERVED BY THE SOLAR DYNAMICS OBSERVATORY

L. P. **Li**¹, J. Zhang¹, J. T. Su¹, and Y. Liu

2016 ApJ 829 L33

23-... April – слабые протоны

26 Apr

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>

27 Apr

Sizes and shapes of sources in solar metric radio bursts

[M. Gordovsky](#), [E.P. Kontar](#), [D.L. Clarkson](#), [N. Chrysaphi](#), [P.K. Browning](#)

ApJ 2021

<https://arxiv.org/pdf/2111.07777.pdf>

28 April – ~>10 UT эрупция большого NE волокна, CME

Oscillations and mass-draining that lead to a sympathetic eruption of a quiescent filament

[Jun Dai](#), [Qingmin Zhang](#), [Yanjie Zhang](#), [Zhe Xu](#), [Yingna Su](#), [Haisheng Ji](#)

ApJ 2021

<https://arxiv.org/pdf/2110.04695.pdf>

Spectral evolution of an eruptive polar crown prominence with IRIS observations

[Jianchao Xue](#), [Hui Li](#), [Yang Su](#)

Frontiers in Physics 2021

<https://arxiv.org/pdf/2109.02908.pdf>

Imaging evidence for solar wind outflows originating from a CME footpoint

[Juraj Lörinčík](#), [Jaroslav Dudík](#), [Guillaume Aulanier](#), [Brigitte Schmieder](#), [Leon Golub](#)

2020 ApJ

<https://arxiv.org/pdf/2010.04250.pdf>

28-29 April

Observations of Solar Coronal Rain in Null Point Topologies

E. I. **Mason**¹, Spiro K. Antiochos², and Nicholeen M. Viall

2019 ApJL 874 L33

sci-hub.se/10.3847/2041-8213/ab0c5d

29 Apr

Small-scale solar surface magnetism

[Robert J. Rutten](#)

Brief review in monograph "Solar Magnetic Variability and Climate" by C. de Jager, S. Duhau, A.C.T. Nieuwenhuizen, 2020, Stip Media, Alkmaar **2021**

<https://arxiv.org/pdf/2105.14533.pdf>

Microflare Heating of a Solar Active Region Observed with NuSTAR, Hinode/XRT, and SDO/AIA

Paul J. [Wright](#), Iain G. Hannah, Brian W. Grefenstette, Lindsay Glesener, Säm Krucker, Hugh S. Hudson, David M. Smith, Andrew J. Marsh, Stephen M. White, Matej Kuhar

ApJ **2017**

<https://arxiv.org/pdf/1706.06108.pdf>

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>

1 May

Failed Solar Eruption of A Multi-thermal Flux Rope

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

ApJL **2022**

<https://arxiv.org/pdf/2211.11148.pdf>

Unveiling the magnetic nature of chromospheric vortices

[Mariarita Murabito](#), [Juie Shetye](#), [Marco Stangalini](#), [Erwin Verwichte](#), [Tony Arber](#), [Ilaria Ermolli](#), [Fabrizio Giorgi](#), [Tom Goffrey](#)

A&A **2020**

<https://arxiv.org/pdf/2006.13776.pdf>

2 May - >~15 UT: **эрупция протяжённого SE-центрального волокна**

An extensive filament eruption was observed in the southern hemisphere across the central meridian and probably over the southeast limb. The filament became unstable after 15h UT and erupted shortly before 19h UT. **A partial halo CME** was observed late in the day and early on May 3.

3 May

Large-amplitude longitudinal oscillations in a solar filament

Q. M. [Zhang](#), T. Li, R. S. Zheng, Y. N. Su, H. S. Ji

ApJ **2017**

<https://arxiv.org/pdf/1705.04820.pdf>

4 May

Heating at the remote footpoints as a brake on jet flows along loops in the solar atmosphere

[Zhenghua Huang](#), [Qingmin Zhang](#), [Lidong Xia](#), [Bo Li](#), [Zhao Wu](#), [Hui Fu](#)

ApJ **2020**

<https://arxiv.org/pdf/2007.04132.pdf>

Observations of Solar Coronal Rain in Null Point Topologies

E. I. **Mason**¹, Spiro K. Antiochos², and Nicholeen M. Viall

2019 ApJL 874 L33

sci-hub.se/10.3847/2041-8213/ab0c5d

5 May – 22:11: **импульсная X2.7 ГАММА вспышка**, NE прилиб, S15~2900, II(2), V, узкий CME
- Примерно в это же время небольшая эрупция южно-центрального волокна

Limb Observations of Global Solar Coronal EUV Wavefronts: the Inclination, Kinematics, Coupling with the Expanding CMEs, and Connection with the CME-driven Shocks

Huidong **Hu** (1), [Bei Zhu](#) (2), [Ying D. Liu](#) (1), [Chong Chen](#) (3), [Rui Wang](#) (1), [Xiaowei Zhao](#) (4)

ApJ 2024

<https://arxiv.org/pdf/2409.15017>

Understanding the Origins of Problem Geomagnetic Storms Associated With "Stealth" Coronal Mass Ejections

Nariaki V. **Nitta**, [Tamitha Mulligan](#), [Emilia K. J. Kilpua](#), [Benjamin J. Lynch](#), [Marilena Mierla](#), [Jennifer O'Kane](#), [Paolo Pagano](#), [Erika Palmerio](#), [Jens Pomoell](#), [Ian G. Richardson](#), [Luciano Rodriguez](#), [Alexis P. Rouillard](#), [Suvadip Sinha](#), [Nandita Srivastava](#), [Dana-Camelia Talpeanu](#), [Stephanie L. Yardley](#), [Andrei N. Zhukov](#)

Space Science Reviews 2021

<https://arxiv.org/pdf/2110.08408.pdf> File

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>

Implications of Flat Optically Thick Microwave Spectra in Solar Flares for Source Size and Morphology

[Shaheda Begum Shaik](#), [Dale E. Gary](#)

ApJ 2021

<https://arxiv.org/pdf/2107.00192.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

Chromospheric condensations and magnetic field in a C3.6-class flare studied via He I D3 spectropolarimetry

Tine **Libbrecht**, [Jaime de la Cruz Rodriguez](#), [Sanja Danilovic](#), [Jorrit Leenaarts](#), [Hiva Pazira](#)

A&A 2018

<https://arxiv.org/pdf/1806.06880.pdf>

Statistical Studies of Solar White-Light Flares and Comparisons with Superflares on Solar-type Stars

Kosuke **Namekata**, [Takahito Sakaue](#), [Kyoko Watanabe](#), [Ayumi Asai](#), [Hiroyuki Maehara](#), [Yuta Notsu](#), [Shota Notsu](#), [Satoshi Honda](#), [Takako Ishii](#), [Kai Ikuta](#), [Daisaku Nogami](#), [Kazunari Shibata](#)

ApJ 2017

<https://arxiv.org/pdf/1710.11325.pdf>

Differences between Doppler velocities of ions and neutral atoms in a solar prominence

Tetsu [Anan](#), Kiyoshi Ichimoto, Andrew. Hillier

A&A 2017

<https://arxiv.org/pdf/1703.02132.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>

Intense Flare-CME Event of the Year 2015: Propagation and Interaction Effects between Sun and Earth's Orbit

Abhishek [Johri](#), P.K. Manoharan

Solar Phys. 2016

<http://arxiv.org/pdf/1603.04555v1.pdf>

EOVSA (Expanded Owens Valley Solar Array) Coverage of a Recent Gamma-ray Flare

Dale [Gary](#) and Gregory Fleishman.

RHESSI Science Nugget No. 252, May 2015

http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/EOVSA_Coverage_of_a_Recent_Gamma-Ray_Flare

5-11 May

Understanding the Origins of Problem Geomagnetic Storms Associated With "Stealth" Coronal Mass Ejections

Nariaki V. [Nitta](#), [Tamitha Mulligan](#), [Emilia K. J. Kilpua](#), [Benjamin J. Lynch](#), [Marilena Mierla](#), [Jennifer O'Kane](#), [Paolo Pagano](#), [Erika Palmerio](#), [Jens Pomoell](#), [Ian G. Richardson](#), [Luciano Rodriguez](#), [Alexis P. Rouillard](#), [Suvadip Sinha](#), [Nandita Srivastava](#), [Dana-Camelia Talpeanu](#), [Stephanie L. Yardley](#), [Andrei N. Zhukov](#)

Space Science Reviews 2021

<https://arxiv.org/pdf/2110.08408.pdf> File

6 May - ~00:30: приход УВ от эрупции 2 мая, заметный форбуш при слабой бурьке, $B_z \sim +10$ nT в хвосте ICME

Sizes and shapes of sources in solar metric radio bursts

[M. Gordovskyy](#), [E.P. Kontar](#), [D.L. Clarkson](#), [N. Chrysaphi](#), [P.K. Browning](#)

ApJ 2021

<https://arxiv.org/pdf/2111.07777.pdf>

On the Source Position and Duration of a Solar Type III Radio Burst Observed by LOFAR

Peijin [Zhang](#), [SiJie Yu](#), [Eduard Kontar](#), [ChuanBing Wang](#)

ApJ 2019

<https://arxiv.org/pdf/1909.08773.pdf>

Detection of spatially structured scattering polarization of Sr I 4607.3 Å with the Fast Solar Polarimeter

Franziska [Zeuner](#), [Alex Feller](#), [Francisco A. Iglesias](#), [Sami K. Solanki](#)

A&A 2018

<https://arxiv.org/pdf/1808.06539.pdf>

Fitting and Reconstruction of Thirteen Simple Coronal Mass Ejections

[Nada Al-Haddad](#), [Teresa Nieves-Chinchilla](#), [Neel P. Savani](#), [Noe Lugaz](#), [Iliia I. Roussev](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1804.02359.pdf>

Imaging Spectroscopy of Type U and J Solar Radio Bursts with LOFAR

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

A&A **2017**

<https://arxiv.org/pdf/1706.07410.pdf>

6-8 May

An Extended Study of the Precursory Signs of Forbush Decreases: New Findings over the Years 2008 – 2016

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

[Solar Physics](#) June **2019**, 294:70

sci-hub.se/10.1007/s11207-019-1461-3

7 May

The frequency ratio and time delay of solar radio emissions with fundamental and harmonic components

[Xingyao Chen](#), [Eduard P. Kontar](#), [Daniel L. Clarkson](#), [Nicolina Chrysaphi](#)

MNRAS **520**, Issue 2, 3117–3126 **2023**

<https://arxiv.org/pdf/2301.11299.pdf>

<https://doi.org/10.1093/mnras/stad325>

<https://academic.oup.com/mnras/article-pdf/520/2/3117/50319010/stad325.pdf>

<https://watermark.silverchair.com/stad325.pdf>

An Extreme Ultraviolet Wave Associated with A Solar Filament Activation

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

ApJ **2020**

<https://arxiv.org/pdf/2004.04904.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>

8 May

Cold Solar Flares. I. Microwave Domain

Alexandra L. [Lysenko](#)¹, Stephen M. White², Dmitry A. Zhdanov³, Natalia 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>

Acceleration of Energetic Ions in Corotating Interaction Region near 1.5 au: Evidence from MAVEN.

[Thampi](#), S. V., Krishnaprasad, C., Shreedevi, P. R., Pant, T. K., & Bhardwaj, A.

(**2019**). The Astrophysical Journal, 880(1), L3.

sci-hub.se/10.3847/2041-8213/ab2b43

Динамика нагрева плазмы и энергетических распределений ускоренных электронов во время солнечных вспышек по данным рентгеновского и ультрафиолетового излучения

[Моторина](#) Г.Г.

Диссертация. ГАО. **2017**

http://www.gaoran.ru/russian/diss/Motorina_diss.pdf

<https://arxiv.org/ftp/arxiv/papers/1710/1710.10652.pdf>

**ВРЕМЕННАЯ ЭВОЛЮЦИЯ ЭНЕРГЕТИЧЕСКОГО
РАСПРЕДЕЛЕНИЯ ЭЛЕКТРОНОВ В СОЛНЕЧНЫХ ВСПЫШКАХ
НА ОСНОВЕ RHESI И SDO/AIA НАБЛЮДЕНИЙ**

Моторина Г.Г.1,2, Контарь Э.П.

Пулково «Солнечная и солнечно-земная физика – 2015», с.289

9 May

**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>

<https://sci-hub.st/https://www.frontiersin.org/articles/10.3389/fspas.2020.551558/full>

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>

Localized Microwave and EUV Bright Structures in an Eruptive Prominence

Jing **Huang**¹, Baolin Tan¹, Satoshi Masuda², Xin Cheng³, Susanta Kumar Bisoi¹, and Victor Melnikov¹

2019 ApJ 874 176

sci-hub.se/10.3847/1538-4357/ab0e80

Prominence eruption initiated by helical kink-instability of an embedded flux rope

P. **Vemareddy**, **N. Gopalswamy**, **B. Ravindra**

ApJ 2017

<https://arxiv.org/pdf/1709.10035.pdf>

11 May

The Temperature - Magnetic Field Relation in Observed and Simulated Sunspots

Michal **Sobotka**, **Reza Rezaei**

Solar Phys. 2017

<https://arxiv.org/pdf/1711.09821.pdf>

12 May - ~03 UT: **быстрое SEP (J10~6 pfu) от SW** эрупции залимбового волокна; вспышка C2.5, CME

15-16 May - The most impressive was an eruptive prominence (EPL) from the NE limb and a connected highly active and partially eruptive filament from the NE quadrant. The EPL (N42E90) erupted at approximately 23:22 UTC on May 15.

18 May

Observations of the chromospheric Evershed flow of sunspot penumbra

Paolo Romano, **Francesco Schillirò**, **Mariachiara Falco**

2023

<https://arxiv.org/pdf/2309.11186.pdf>

19-20 May

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>

20 May

Observation of a 3D magnetic null point

P. **Romano**, M. Falco, S. L. Guglielmino, M. Murabito

ApJ 2017

<https://arxiv.org/pdf/1703.00665.pdf>

20-21 May

Evolution Of Downflows In The Transition Region Above A Sunspot Over Short Time-Scales

C. J. **Nelson**, S. Krishna Prasad, M. Mathioudakis

A&A 2020

<https://arxiv.org/pdf/2006.13617.pdf>

21 May

- A partial NE halo CME was observed late on May 21 and early on May 22. Backsided? A filament eruption in the central northern hemisphere starting near 20h UT may have been the source?

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>

21-23 May

Long-period oscillations in the lower solar atmosphere prior to flare events

A. **Wiśniewska**¹, M. B. Korsós^{2,3,5}, I. Kontogiannis¹, Sz. Soós^{3,5} and R. Erdélyi^{4,3,5}

A&A, 686, A224 (2024)

<https://www.aanda.org/articles/aa/pdf/2024/06/aa48606-23.pdf>

May 21-June 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

23 May

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>

Frequency Distribution of Acoustic Oscillation in the Solar Atmosphere During Flare Event

A. **Wiśniewska**^{1,2}, E. Chmielewska³, K. Radziszewski³, M. Roth², and J. Staiger²

2019 ApJ 886 32

<https://doi.org/10.3847/1538-4357/ab487c>

<https://arxiv.org/ftp/arxiv/papers/2203/2203.02420.pdf>

Multiwavelength Observations of a Flux Rope Formation by Series of Magnetic Reconnection in the Chromosphere

Pankaj **Kumar**, Vasył Yurchyshyn, Kyung-Suk Cho, Haimin Wang

A&A 2017

24 May

Spectropolarimetric observations of an arch filament system with the GREGOR solar telescope

H. [Balthasar](#), P. Gömöry, S.J. González Manrique,

Proceedings 12th Potsdam Thinkshop to appear in *Astronomische Nachrichten* 2016

<http://arxiv.org/pdf/1609.01514v1.pdf>

25-29 May

Ultra Low-Frequency Oscillations of a Solar Filament in $H\alpha$ Revealed With the Data of the Global Oscillation Network Group (Gong)

V.I. [Efremov](#), L.D. Parfinenko, A.A. Soloviev

2016

<http://arxiv.org/pdf/1602.03137v1.pdf>

УЛЬТРАНИЗКОЧАСТОТНЫЕ КОЛЕБАНИЯ СОЛНЕЧНЫХ ВОЛОКОН В $H\alpha$ ПО ДАННЫМ GLOBAL OSCILLATION NETWORK GROUP (GONG)

[Ефремов](#) В.И., Парфиненко Л.Д., Соловьев А.А.

Пулково «Солнечная и солнечно-земная физика – 2015», с. 133

June-Nov 2015

Fractal dimensions of umbral and penumbral regions of sunspots

B. [Rajkumar](#) (1), [S. Haque](#) (1), [W. Hruby](#) (2)

Solar Phys. 2017

<https://arxiv.org/ftp/arxiv/papers/1709/1709.08042.pdf>

3 June

Three-dimensional magnetic field structure of a flux emerging region in the solar atmosphere

Rahul [Yadav](#), [J. de la Cruz Rodríguez](#), [C. J. Díaz Baso](#), [Avijeet Prasad](#), [Tine Libbrecht](#), [Carolina Robustini](#), [A. Asensio Ramos](#)

A&A 2019

<https://arxiv.org/pdf/1910.13279.pdf>

4 Jun

Statistical Evidence for Small-Scale Interchange Reconnection at a Coronal Hole Boundary

Emily I. [Mason](#), [Vadim M. Uritsky](#)

ApJ 2022

<https://arxiv.org/pdf/2209.02833.pdf>

5 Jun

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>

5-17 June

Acceleration of Energetic Ions in Corotating Interaction Region near 1.5 au: Evidence from MAVEN.

[Thampi](#), S. V., [Krishnaprasad](#), C., [Shreedevi](#), P. R., [Pant](#), T. K., & [Bhardwaj](#), A.

(2019). *The Astrophysical Journal*, 880(1), L3.

[sci-hub.se/10.3847/2041-8213/ab2b43](https://arxiv.org/abs/1905.08882)

[sci-hub.se/10.3847/2041-8213/ab2b43](https://arxiv.org/abs/1905.08882)

7 June

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>

An Anisotropic Cosmic-Ray Enhancement Event on 07-June-2015: A Possible Origin

Agnieszka [Gil](#), Gennady A. Kovaltsov, Vladimir V. Mikhailov, Alexander Mishev, Stepan Poluianov, Ilya G. Usoskin

[Solar Physics](#) November 2018, 293:154
<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1375-5.pdf>
<https://sci-hub.tw/10.1007/s11207-018-1375-5>

12 June

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>

Observing Kelvin-Helmholtz instability in solar blowout jet

Xiaohong [Li](#), [Jun Zhang](#), [Shuhong Yang](#), [Yijun Hou](#), [Robert Erdelyi](#)

Scientific Reports 2018

<https://www.nature.com/articles/s41598-018-26581-4.pdf>

14 June

Physical Characteristics of Umbral Dots Derived from a High-Resolution Observations

Ali [Kilcik](#), [Volkan Sarp](#), [Vasyl Yurchyshyn](#), [Jean-Pierre Rozelot](#) & [Atila Ozguc](#)

[Solar Physics](#) volume 295, Article number: 58 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01618-y.pdf>

15 June

A Comparative Study of Solar Active Region 12371 with Data-constrained and Data-driven MHD Simulations

[Satoshi Inoue](#), [Keiji Hayashi](#), [Takahiro Miyoshi](#), [Ju Jing](#), [Haimin Wang](#)

ApJL 2023

<https://arxiv.org/pdf/2301.12336.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>

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>

16 June

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>

A Fractal Analysis of Magnetograms within Active Regions

Brandon [Rajkumar](#), [Shirin Haque](#)

2019

<https://arxiv.org/ftp/arxiv/papers/1911/1911.03675.pdf>

The Observational Evidence for the Internal Excitation of Sunspot Oscillations Inferred from the Fe I 5435 Å Line

Kyuhyouon [Cho](#), [Jongchul Chae](#), [Eun-kyung Lim](#), [Heesu Yang](#)

ApJ 2019

<https://arxiv.org/pdf/1906.01971.pdf>

18 June - >02 UT: Мягкие протоны J10~12 pfu, видимо, от эрупции (за)лимбового SW ВОЛОКНА;

– AR 12371 produced a long duration M3 Flare around 17 UT. S5~2300 sfu. Full halo CME.

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

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

2022 ApJ 933 15

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

Thermodynamic Evolution of Solar Flare Supra-arcade Downflows

Z. F. [Li](#)^{1,2}, X. Cheng^{1,2,3}, M. D. Ding^{1,2}, Katharine K. Reeves⁴, DeOndre Kittrell^{4,5}, Mark Weber⁴, and David E. McKenzie⁶

2021 ApJ 915 124

<https://arxiv.org/pdf/2107.09215.pdf>

<https://doi.org/10.3847/1538-4357/ac043e>

A Longitudinally Asymmetrical Kink Oscillation of Coronal Loop Caused by a Diagonally Placed Flare below the Loop System

Hongbo [Li](#)¹, Hengqiang Feng^{1,2}, Yu Liu³, Zhanjun Tian¹, Jin Huang^{3,4}, and Yuhu Miao

2019 ApJ 881 111

sci-hub.se/10.3847/1538-4357/ab2bf7

The evolution of coronal mass ejections in the inner heliosphere: Implementing the spheromak model with EUHFORIA

C. [Verbeke](#), J. Pomoell and S. Poedts

A&A 627, A111 (2019)

sci-hub.se/10.1051/0004-6361/201834702

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>

Fundamental and Harmonic Oscillations in Neighboring Coronal Loops

Hongbo [Li](#)^{1,2,3}, Yu Liu^{1,2}, and Kuan Vai Tam

2017 ApJ 842 99

<http://iopscience.iop.org/sci-hub.cc/0004-637X/842/2/99/>

18-25 June

SWASTi-CME: A physics-based model to study CME evolution and its interaction with Solar Wind

Prateek [Mayank](#), [Bhargav Vaidya](#), [Wageesh Mishra](#), [D. Chakrabarty](#)

ApJS 2023

<https://arxiv.org/pdf/2310.18219.pdf>

Operational solar flare forecasting via video-based deep learning

Sabrina [Guastavino](#), Francesco Marchetti, Federico Benvenuto, Cristina Campi, and Michele Piana

Front. Astron. Space Sci. 9:1039805. 2023 doi: 10.3389/fspas.2022.1039805

<https://www.frontiersin.org/articles/10.3389/fspas.2022.1039805/pdf>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.1039805/full>

Magnetic Structure in Successively Erupting Active Regions: Comparison of Flare-Ribbons with Quasi-Separatrix Layers

[P. Vemareddy](#)

Front. Phys 2021

<https://arxiv.org/pdf/2109.14583.pdf>

A Weak Fermi Gamma-ray Event Associated with a Halo CME and a Type II Radio Burst

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

Proceedings URSI GASS 2020 2021

<https://arxiv.org/ftp/arxiv/papers/2105/2105.01212.pdf>

Restoring process of sunspot penumbra

[P. Romano](#), [M. Murabito](#), [S. L. Guglielmino](#), [F. Zuccarello](#), [M. Falco](#)

ApJ 2020

<https://arxiv.org/pdf/2006.09746.pdf>

The evolution of coronal mass ejections in the inner heliosphere: Implementing the spheromak model with EUHFORIA

C. [Verbeke](#), J. Pomoell and S. Poedts

A&A 627, A111 (2019)

[sci-hub.se/10.1051/0004-6361/201834702](https://arxiv.org/abs/10.1051/0004-6361/201834702)

Unusual Cosmic Ray Variations During the Forbush Decreases of June 2015

E. [Samara](#), A. Smpsonias, I. Lytrosyngounis, D. Lingri, H. Mavromichalaki, C. Sgouropoulos

[Solar Physics](#) April 2018, 293:67

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1290-9.pdf>

Study of Three-Dimensional Magnetic Structure and the Successive Eruptive Nature of Active Region 12371

[P. Vemareddy](#), [P. Demóulin](#)

ApJ 2018

<https://arxiv.org/pdf/1803.04728.pdf>

ОСОБЕННОСТИ ПОТОКОВ СОЛНЕЧНОГО ВЕТРА В ПЕРИОД 21-28 ИЮНЯ 2015 Г. КАК РЕЗУЛЬТАТ ВЗАИМОДЕЙСТВИЯ КОРОНАЛЬНЫХ ВЫБРОСОВ МАССЫ И РЕКУРРЕНТНЫХ ПОТОКОВ ИЗ КОРОНАЛЬНЫХ ДЫР

[ШУГАЙ](#) Ю.С.✉1, СЛЕМЗИН В.А.2, РОДЬКИН Д.Г.2

Косм. Исслед. Том: 55Номер: 6 Год: 2017 Страницы: 399-406

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>

Interplanetary Consequences of Coronal Mass Ejection Events occurred during 18--25 June 2015

P.K. **Manoharan**, D. Maia, A. Johri, M.S. Induja

ASP Conference Series **2016**

<http://arxiv.org/pdf/1603.03562v1.pdf>

EUHFORIA: European heliospheric forecasting information asset

Jens **Pomoell**^{1*} and S. Poedts²

J. Space Weather Space Clim. **2018**, 8, A35

<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170062.pdf>

The 2015 Summer Solstice Storm: one of the major geomagnetic storms of solar cycle 24 observed at ground level

C. R. A. **Augusto**, [C. E. Navia](#), [M. N. de Oliveira](#), [A. A. Nepomuceno](#), [J. P. Raulin](#), [E. Tueros](#), [R. R. de Mendonça](#), [A. C. Fauth](#), [H. Vieira de Souza](#), [V. Kopenkin](#), [T. Sinzi](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1805.05277.pdf>

Unusual Cosmic Ray Variations During the Forbush Decreases of June 2015

E. **Samara**, A. Smpontias, I. Lytrosyngounis, D. Lingri, H. Mavromichalaki, C. Sgouropoulos

Solar Physics April **2018**, 293:67

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1290-9.pdf>

Study of Three-Dimensional Magnetic Structure and the Successive Eruptive Nature of Active Region 12371

P. **Vemareddy**, [P. Demóulin](#)

ApJ **2018**

<https://arxiv.org/pdf/1803.04728.pdf>

Halo Coronal Mass Ejections during Solar Cycle 24: reconstruction of the global scenario and geoeffectiveness

Camilla **Scolini**, [Mauro Messerotti](#), [Stefaan Poedts](#), [Luciano Rodriguez](#)

Journal of Space Weather and Space Climate 2017

<https://arxiv.org/pdf/1712.05847.pdf> **File**

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>

Interplanetary Consequences of Coronal Mass Ejection Events occurred during 18--25 June 2015

P.K. **Manoharan**, D. Maia, A. Johri, M.S. Induja

ASP Conference Series **2016**

<http://arxiv.org/pdf/1603.03562v1.pdf>

18 Jun -3 Jul

Solar Energetic Particle Events Detected in the Housekeeping Data of the European Space Agency's Spacecraft Flotilla in the Solar System

Beatriz **Sánchez-Cano**, [Olivier Witasse](#), [Elise W. Knutsen](#), [Dikshita Meggi](#), +++

Space Weather [Volume21, Issue8](#) August **2023** e2023SW003540

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2023SW003540>

19 June: ~05 UT: A **partial halo CME** caused by a **large filament eruption** in the southern hemisphere could reach Earth on June 22.

The evolution of coronal mass ejections in the inner heliosphere: Implementing the spheromak model with EUHFORIA

C. [Verbeke](#), J. Pomoell and S. Poedts

A&A 627, A111 (2019)

sci-hub.se/10.1051/0004-6361/201834702

19-27 Jun

Magnetic evolution of active regions: formation and eruption of magnetic flux ropes

Review

[P. Vemareddy](#)

IAU 388 proc. 2024

<https://arxiv.org/pdf/2410.02670>

Wavelet Analysis of Forbush Decreases at High-Latitude Stations During Geomagnetic Disturbances

Roshan Kumar [Mishra](#), [Ashok Silwal](#), [Rabin Baral](#), [Binod Adhikari](#), [Carlos Roberto Braga](#), [Sujan Prasad Gautam](#), [Priyanka Kumari Das](#) & [Yenca Migoya-Orue](#)

[Solar Physics](#) volume 297, Article number: 26 (2022)

<https://link.springer.com/content/pdf/10.1007/s11207-022-01948-z.pdf>

20 June

Sizes and shapes of sources in solar metric radio bursts

[M. Gordovskyy](#), [E.P. Kontar](#), [D.L. Clarkson](#), [N. Chrysaphi](#), [P.K. Browning](#)

ApJ 2021

<https://arxiv.org/pdf/2111.07777.pdf>

Frequency–Distance Structure of Solar Radio Sources Observed by LOFAR

Mykola [Gordovskyy](#)¹, Eduard Kontar², Philippa Browning¹, and Alexey Kuznetsov

2019 ApJ 873 48

<https://iopscience.iop.org/article/10.3847/1538-4357/ab03d8/pdf>

Decimetric emission 500'' away from a flaring Site: Possible scenarios from GMRT solar radio observations

Susanta Kumar [Bisoi](#), [H. S. Sawant](#), [P. Janardhan](#), [Y. Yan](#), [L. Chen](#), [Arun Kumar Awasthi](#), [Shweta Srivastava](#), [G. Gao](#)

ApJ 2018

<https://arxiv.org/pdf/1806.05802.pdf>

Extending Counter-Streaming Motion from an Active Region Filament to Sunspot Light Bridge

Haimin [Wang](#), [Rui Liu](#), [Qin Li](#), [Chang Liu](#), [Na Deng](#), [Yan Xu](#), [Ju Jing](#), [Yuming Wang](#), [Wenda Cao](#)

ApJL 2017

<https://arxiv.org/pdf/1712.06783.pdf>

Observations of a CME-related type IV burst with LOFAR

Alexey [Kuznetsov](#)*† and Eduard Kontar¹

CESRA Abstract 2016

http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v1.pdf

The Fastest Flare

Hugh **Hudson** and Paulo Simões

RHESSI Science Nuggets, #256, June 2015

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

20-22 June

Dark structures in sunspot light bridges

Jingwen **Zhang**, [Hui Tian](#), [Sami K. Solanki](#), [Haimin Wang](#), [Hardi Peter](#), [Kwangsu Ahn](#), [Yan Xu](#), [Yingjie Zhu](#), [Wenda Cao](#), [Jiansen He](#), [Linghua Wang](#)

2018

<https://arxiv.org/pdf/1809.00146.pdf>

20-23 June

Study of Evolution and Geo-effectiveness of Coronal Mass Ejection–Coronal Mass Ejection Interactions Using Magnetohydrodynamic Simulations with SWASTi Framework

Prateek **Mayank**¹, Stefan Lotz², Bhargav Vaidya^{1,3}, Wageesh Mishra⁴, and D. Chakrabarty⁵

2024 ApJ 976 126

<https://iopscience.iop.org/article/10.3847/1538-4357/ad8084/pdf>

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>

21 June – 01:42, 02:36: M2/1N, M2.6 двойная LDE вспышка, **Prolonged gamma**, N12E13, S9~1500, 02:24-02:47 II тип, **срыв шумовой бури**, значительная эрупция, гало CME will likely reach Earth on June 23

- **Мягкие протоны**: сначала J10~2.5, потом (22-ого) J10~100 pfu и J10~1000 pfu

- 09:44: M3.8/2B квазиимпульсная западная вспышка, S21W57, S5-9~130 **Gamma-rays**

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

SWASTi-CME: A physics-based model to study CME evolution and its interaction with Solar Wind

Prateek **Mayank**, [Bhargav Vaidya](#), [Wageesh Mishra](#), [D. Chakrabarty](#)

ApJS 2023

<https://arxiv.org/pdf/2310.18219.pdf>

Clusters of Solar Radio Spikes Modulated by Quasi-Periodic Pulsations in a Confined Flare

Huang, Jing ; Tan, Chengming ; Chen, Xingyao ; Tan, Baolin ; Yan, Yihua ; Zhang, Yin ; Ma, Suli ; Zhou, Zhichao ; Zhang, Minghui ; Wang, Wei ; Chen, Linjie

Universe, vol. 8, issue 7, p. 348, 2022

<https://www.mdpi.com/2218-1997/8/7/348/pdf?version=1656060155>

ПОВЫШЕННАЯ ЯРКОСТЬ МИКРОВОЛНОВОГО ИЗЛУЧЕНИЯ КАК ПРИЗНАК ВСПЫШЕЧНО-ПРОДУКТИВНЫХ АКТИВНЫХ ОБЛАСТЕЙ ПО НАБЛЮДЕНИЯМ АКТИВНОЙ ОБЛАСТИ NOAA 12 371

Петерова Н.Г., Топчило Н.А., Курочкин Е.А.

ГИА Том: 62Номер: 1 Год: 2022 Страницы: 28-39

Magnetic Structure in Successively Erupting Active Regions: Comparison of Flare-Ribbons with Quasi-Separatrix Layers

P. Vemareddy

Front. Phys 2021

<https://arxiv.org/pdf/2109.14583.pdf>

Implications of Flat Optically Thick Microwave Spectra in Solar Flares for Source Size and Morphology

[Shaheda Begum Shaik](#), [Dale E. Gary](#)

ApJ 2021

<https://arxiv.org/pdf/2107.00192.pdf>

Flux Rope Formation by a Confined Solar Flare Preceding a Coronal Mass Ejection

[Bernhard Kliem](#), [Jeongwoo Lee](#), [Stephen M. White](#), [Chang Liu](#), [Satoshi Masuda](#)

ApJ 2021

<https://arxiv.org/pdf/2101.02181.pdf>

On the Emission Region of Type II Radio Bursts in Interplanetary Shock Fronts

E. [Aguilar-Rodriguez](#) & [P. Corona-Romero](#)

[Solar Physics](#) volume 295, Article number: 77 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01643-x.pdf>

ICME Evolution in the Inner Heliosphere

Invited Review

J. G. [Luhmann](#), [N. Gopalswamy](#), [L. K. Jian](#) & [N. Lugaz](#)

[Solar Physics](#) volume 295, Article number: 61 (2020) File

<https://link.springer.com/content/pdf/10.1007%2Fs11207-020-01624-0.pdf>

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

Melissa [Pesce-Rollins](#)

Presentation at the Fleishman Webinar Nov. 13, 2019

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

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

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

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

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

The evolution of coronal mass ejections in the inner heliosphere: Implementing the spheromak model with EUHFORIA

C. [Verbeke](#), J. Pomoell and S. Poedts

A&A 627, A111 (2019)

<sci-hub.se/10.1051/0004-6361/201834702>

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

Current State of Reduced Solar Activity: Intense Space Weather Events in the Inner Heliosphere

P.K. [Manoharan](#), K. Mahalakshmi, A. Johri, B.V. Jackson, D. Ravikumar,

K. Kalyanasundaram, S.P. Subramanian, A. K. Mittal

SUN and GEOSPHERE Vol.13, No.2 – 2018, 135-144

http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG_v13_No2_2018-pp-135-143.pdf

Impacts of EUV Wavefronts on Coronal Structures in Homologous Coronal Mass Ejections

Rui [Liu](#), [Yuming Wang](#), [Jeongwoo Lee](#), [Chenglong Shen](#)

ApJ **2018**

<https://arxiv.org/pdf/1811.01326.pdf>

EUHFORIA: European heliospheric forecasting information asset

Jens [Pomoell](#)^{1*} and S. Poedts²

J. Space Weather Space Clim. **2018**, 8, A35

<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170062.pdf>

Magnetic Structure of a Composite Solar Microwave Burst

Jeongwoo [Lee](#)^{1,2}, Stephen M. White³, Chang Liu¹, Bernhard Kliem^{2,4}, and Satoshi Masuda

2018 ApJ 856 70

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

<http://sci-hub.tw/http://iopscience.iop.org/0004-637X/856/1/70/>

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

S. W. [Kahler](#)¹, E. W. Cliver², and M. Kazachenko³

2018 ApJ 868 81

sci-hub.tw/10.3847/1538-4357/aae9d8

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

Sun-to-Earth Propagation of the 2015 June 21 Coronal Mass Ejection Revealed by Optical, EUV, and Radio Observations

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

JASTP 179, p. 225-238. **2018**

<https://arxiv.org/ftp/arxiv/papers/1807/1807.10979.pdf>

A Major Geoeffective CME from NOAA 12371: Initiation, CME–CME Interactions, and Interplanetary Consequences

Bhuvan [Joshi](#), M. Syed Ibrahim, A. Shanmugaraju, D. Chakrabarty

[Solar Physics](#) July **2018**, 293:107

<http://sci-hub.tw/http://link.springer.com/10.1007/s11207-018-1325-2>

Thermal and Nonthermal Emissions of a Composite Flare Derived from NoRH and SDO Observations

Jeongwoo [Lee](#)^{1,2}, Stephen M. White³, Ju Jing⁴, Chang Liu⁴, Satoshi Masuda², and Jongchul Chae¹

2017 ApJ 850 124

Observation of a Large-scale Quasi-circular Secondary Ribbon associated with Successive Flares and a Halo CME

Eun-Kyung [Lim](#), [Vasyl Yurchyshyn](#), [Pankaj Kumar](#), [Kyuhyoun Cho](#), [Chaowei Jiang](#), [Sujin Kim](#), [Heesu Yang](#), [Jongchul Chae](#), [Kyung-Suk Cho](#), [Jeongwoo Lee](#)

ApJ **2017**

<https://arxiv.org/pdf/1711.00622.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

Comprehensive Analysis of the Geoeffective Solar Event of 21 June 2015: Effects on the Magnetosphere, Plasmasphere, and Ionosphere Systems

Mirko [Piersanti](#), Tommaso Alberti, Alessandro Bemporad ...

[Solar Physics](#) November 2017, 292:169

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1186-0.pdf>

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David [Webb](#), Nariaki Nitta

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

Study of the Geoeffectiveness and Galactic Cosmic-Ray Response of VarSITI-ISEST Campaign Events in Solar Cycle 24

O. P. M. [Aslam](#), Badruddin

[Solar Physics](#) September 2017, 292:135

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>

21-24 June

Understanding Problem Forecasts of ISEST Campaign Flare-CME Events

David [Webb](#), Nariaki Nitta

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

21-27 June

The evolution of coronal mass ejections in the inner heliosphere: Implementing the spheromak model with EUHFORIA

C. [Verbeke](#), J. Pomoell and S. Poedts

A&A 627, A111 (2019)

sci-hub.se/10.1051/0004-6361/201834702

EUHFORIA: European heliospheric forecasting information asset

Jens [Pomoell](#)^{1*} and S. Poedts²

J. Space Weather Space Clim. 2018, 8, A35

<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170062.pdf>

22 June- 18:23: M6.5/2B LDE flare, S15~1200, П тип

- Мягкие протоны достигли J10~1000 pfu

The Lorentz force at work: multi-phase magnetohydrodynamics throughout a flare lifespan

[Wenzhi Ruan](#), [Rony Keppens](#), [Limei Yan](#), [Patrick Antolin](#)

ApJ 2024

<https://arxiv.org/pdf/2403.19204.pdf>

SWASTi-CME: A physics-based model to study CME evolution and its interaction with Solar Wind

Prateek [Mayank](#), [Bhargav Vaidya](#), [Wageesh Mishra](#), [D. Chakrabarty](#)

ApJS 2023

<https://arxiv.org/pdf/2310.18219.pdf>

Characterizing 3D Magnetic Structures in Sunspot Light Bridges

Ju **Jing**^{1,2}, Nian Liu^{1,2}, Jeongwoo Lee^{1,2}, Yan Xu^{1,2}, Wenda Cao^{1,2}, and Haimin Wang^{1,2}
2023 ApJ 952 40
<https://iopscience.iop.org/article/10.3847/1538-4357/acd44f/pdf>

Magnetic Reconnection Rate in the M6.5 Solar Flare on 2015 June 22

Bryce **Cannon**¹, Ju Jing^{1,2}, Qin Li^{1,2}, Nian Liu^{1,2}, Jeongwoo Lee^{1,2}, Wenda Cao^{1,2}, and Haimin Wang^{1,2}
2023 ApJ 950 144
<https://iopscience.iop.org/article/10.3847/1538-4357/accf9f/pdf>

Coronal Magnetic Field Extrapolation and Topological Analysis of Fine-Scale Structures during Solar Flare Precursors

[Wen He](#), [Qiang Hu](#), [Ju Jing](#), [Haimin Wang](#), [Chaowei Jiang](#), [Sushree S. Nayak](#), [Avijeet Prasad](#)
ApJ **2023**
<https://arxiv.org/pdf/2306.03226.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>

Formation and Eruption of Hot Channels during an M6.5 Class Solar Flare

Yanjie **Liu**^{1,2}, Yingna Su^{1,2}, Rui Liu³, Jialin Chen^{1,2}, Tie Liu^{4,5}, and Haisheng Ji^{1,2}
2022 ApJ 941 83
<https://arxiv.org/pdf/2211.06060.pdf>
<https://iopscience.iop.org/article/10.3847/1538-4357/aca08c/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>

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>

To Rain or Not to Rain: Correlating GOES Flare Class and Coronal Rain Statistics

[Emily I. Mason](#), [Kara L. Kniezewski](#)
ApJ **2022**
<https://arxiv.org/pdf/2209.11283.pdf>

Multi-instrument Comparative Study of Temperature, Number Density, and Emission Measure during the Precursor Phase of a Solar Flare

[Nian Liu](#), [Ju Jing](#), [Yan Xu](#), [Haimin Wang](#)
Astrophysical Journal, 930:154 (10pp), **2022** May 10
<https://arxiv.org/ftp/arxiv/papers/2302/2302.06825.pdf>

Blueshifted Si iv 1402.77 Å Line Profiles in a Moving Flare Kernel Observed by IRIS

Juraj **Lörinčík**^{1,2}, Jaroslav Dudík³, and Vanessa Polito^{1,2}
2022 ApJ 934 80
<https://iopscience.iop.org/article/10.3847/1538-4357/ac78e2/pdf>

On the nature of photospheric horizontal magnetic field increase in major solar flares

[Lijuan Liu](#), [Zhenjun Zhou](#), [Yuming Wang](#), [Xudong Sun](#), [Guoqiang Wang](#)

ApJL 2022

<https://arxiv.org/pdf/2207.12044.pdf>

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

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

Space Weather e2021SW002797 2022

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

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

Apparent Footpoint Rotation and Writhe of Double Hot Channels in a Solar Flare

Yanjie [Liu](#)^{1,2}, Yingna Su^{1,2}, Rui Liu³, Jialin Chen^{1,2}, Tie Liu^{4,5}, and Haisheng Ji^{1,2}

2022 ApJ 930 130

<https://iopscience.iop.org/article/10.3847/1538-4357/ac63ac/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>

КОСМИЧЕСКАЯ ПОГОДА: ФАКТОРЫ РИСКА ДЛЯ ГЛОБАЛЬНЫХ НАВИГАЦИОННЫХ СПУТНИКОВЫХ СИСТЕМ Review

[Демьянов В.В.](#), [Ясюкевич Ю.В.](#)

[СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 7 № 2, 2021](#), С. 24–29

<https://naukaru.ru/ru/storage/viewWindow/72945>

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>

Comparative study of electric currents and energetic particle fluxes in a solar flare and Earth magnetospheric substorm

[Anton Artemyev](#), [Ivan Zimovets](#), [Ivan Sharykin](#), [Yukitoshi Nishimura](#), [Cooper Downs](#), [James Weygand](#), [Robyn Fiori](#), [Xiao-Jia Zhang](#), [Andrei Runov](#), [Marco Velli](#), [Vassilis Angelopoulos](#), [Olga Panasenco](#), [Christopher Russell](#), [Yoshizumi Miyoshi](#), [Satoshi Kasahara](#), [Ayako Matsuoka](#), [Shoichiro Yokota](#), [Kunihiro Keika](#), [Tomoaki Hori](#), [Yoichi Kazama](#), [Shiang-Yu Wang](#), [Iku Shinohara](#), [Yasunobu Ogawa](#)

ApJ ? 2021

<https://arxiv.org/pdf/2105.03772.pdf>

High Resolution Observations of Solar Flares

Haimin [Wang](#)

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

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>

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>

Onset Mechanism of M6.5 Solar Flare Observed in Active Region 12371
Jihye [Kang](#), [Satoshi Inoue](#), [Kanya Kusano](#), [Sung-Hong Park](#), [Yong-Jae Moon](#)
ApJ **2019**
<https://arxiv.org/pdf/1911.05337.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>

The evolution of coronal mass ejections in the inner heliosphere: Implementing the spheromak model with EUHFORIA
C. [Verbeke](#), J. Pomoell and S. Poedts
A&A 627, A111 (2019)
sci-hub.se/10.1051/0004-6361/201834702

Spectral Diagnosis of Mg ii and H α Lines during the Initial Stage of an M6.5 Solar Flare
Nengyi [Huang](#), Yan Xu, Viacheslav M Sadykov, Ju Jing, and Haimin Wang
2019 ApJL 878 L15
<https://iopscience.iop.org/article/10.3847/2041-8213/ab2330/pdf>

Flare-productive active regions Review
Shin [Toriumi](#), [Haimin Wang](#)
Living Reviews in Solar Physics **2019**
<https://arxiv.org/pdf/1904.12027.pdf>

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

Impacts of EUV Wavefronts on Coronal Structures in Homologous Coronal Mass Ejections
Rui [Liu](#), [Yuming Wang](#), [Jeongwoo Lee](#), [Chenglong Shen](#)
ApJ **2018**
<https://arxiv.org/pdf/1811.01326.pdf>

Evolution of Photospheric Vector Magnetic Field Associated with Moving Flare Ribbons As Seen By GST
Chang [Liu](#), [Wenda Cao](#), [Jongchul Chae](#), [Kwangsu Ahn](#), [Debi Prasad Choudhary](#), [Jeongwoo Lee](#), [Rui Liu](#), [Na Deng](#), [Jiasheng Wang](#), [Haimin Wang](#)
ApJ **2018**
<https://arxiv.org/pdf/1810.11733.pdf>

An operational solar wind prediction system transitioning fundamental science to operations
Jingjing [Wang](#)^{1*}, Xianzhi Ao¹, Yuming Wang², Chuanbing Wang², Yanxia Cai¹, Bingxian Luo^{1,3}, Siqing Liu^{1,3}, Chenglong Shen², Bin Zhuang², Xianghui Xue² and Jiancun Gong¹
J. Space Weather Space Clim. Volume 8, **2018** A39
<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170037.pdf>

First Joint Observations of the Space Weather Events over Mexico

V. [De la Luz](#), [J.A González-Esparza](#), [M.A. Sergeeva](#), [P. Corona-Romero](#), [L.X. González](#), [J. Mejía-Ambriz](#), [J.F. Valdés-Galicia](#), [E. Aguilar-Rodríguez](#), [M. Rodríguez-Martínez](#), [E. Romero-Hernández](#), [E. Andrade](#), [P. Villanueva](#), [E. Huipe-Domratheva](#), [G. Cifuentes](#), [E. Hernandez](#), [C. Monstein](#)
Annales Geophysicae (ANGEO) **2018**
<https://arxiv.org/pdf/1808.07425.pdf>

Photospheric response to a flare

Michael S. [Wheatland](#), [Donald B. Melrose](#), [Alpha Mastrano](#)
ApJ **2018**
<https://arxiv.org/pdf/1808.03097.pdf>

Cosmic-Ray Short Burst Observed with the Global Muon Detector Network (GMDN) on 2015 June 22

K. [Munakata](#)¹, M. Kozai², P. Evenson³, T. Kuwabara³, C. Kato¹, M. Tokumaru⁴, M. Rockenbach⁵, A. Dal Lago⁵, R. R. S. de Mendonca^{5,6}, C. R. Braga⁵...
2018 ApJ 862 170
<http://sci-hub.tw/http://iopscience.iop.org/article/10.3847/1538-4357/aacdf/meta>

EUHFORIA: European heliospheric forecasting information asset

Jens [Pomoell](#)^{1*} and S. Poedts²
J. Space Weather Space Clim. **2018**, 8, A35
<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170062.pdf>

Automated Solar Flare Detection and Feature Extraction in High-Resolution and Full-Disk H α Images

[Meng Yang](#), [Yu Tian](#), [Yangyi Liu](#), [Changhui Rao](#)
[Solar Physics](#) May **2018**, 293:81
<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1300-y.pdf>

Was the cosmic ray burst detected by the GRAPES-3 on 22 June 2015 caused by transient weakening of geomagnetic field or by an interplanetary anisotropy?

[P.K. Mohanty](#), [K.P. Arunbabu](#), [T. Aziz](#), [S.R. Dugad](#), [S.K. Gupta](#), [B. Hariharan](#), [P. Jagadeesan](#), [A. Jain](#), [S.D. Morris](#), [P.K. Nayak](#), [P.S. Rakshe](#), [K. Ramesh](#), [B.S. Rao](#), [M. Zuberi](#), [Y. Hayashi](#), [S. Kawakami](#), [P. Subramanian](#), [S. Raha](#), [S. Ahmad](#), [A. Oshima](#), [S. Shibata](#), [H. Kojima](#)
Physical Review D **2018**
<https://arxiv.org/pdf/1803.10499.pdf>

Interplanetary Coronal Mass Ejections During Solar Cycles 23 and 24: Sun–Earth Propagation Characteristics and Consequences at the Near-Earth Region

M. Syed [Ibrahim](#), Bhuwan Joshi, K.-S. Cho, R.-S. Kim, Y.-J. Moon
[Solar Physics](#) May **2019**, 294:54 **File**
sci-hub.se/10.1007/s11207-019-1443-5

Solar Activities and Its Impact on Space Weather

[Pandit](#), Drabindra; [Chapagain](#), [Narayan P.](#); [Adhikari](#), [Binod](#); [Mishra](#), [Roshan K.](#)
Long-term Datasets for the Understanding of Solar and Stellar Magnetic Cycles, Proceedings of the International Astronomical Union, IAU Symposium, Volume 340, pp. 149-150, **2018**
sci-hub.se/10.1017/S1743921318001606

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>

An Anisotropic Cosmic-Ray Enhancement Event on 07-June-2015: A Possible Origin

Agnieszka [Gil](#), Gennady A. Kovaltsov, Vladimir V. Mikhailov, Alexander Mishev, Stepan Poluianov, Ilya G. Usoskin

[Solar Physics](#) November **2018**, 293:154

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1375-5.pdf>
sci-hub.tw/10.1007/s11207-018-1375-5

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

Review

Robert J. [Redmon](#)*[William F. Denig](#)*[Paul T.M. Loto'aniu](#)*†[Dominic Fuller-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>

Was the cosmic ray burst detected by the GRAPES-3 on 22 June 2015 caused by transient weakening of geomagnetic field or by an interplanetary anisotropy?

P.K. [Mohanty](#), [K.P. Arunbabu](#), [T. Aziz](#), [S.R. Dugad](#), [S.K. Gupta](#), [B. Hariharan](#), [P. Jagadeesan](#), [A. Jain](#), [S.D. Morris](#), [P.K. Nayak](#), [P.S. Rakshe](#), [K. Ramesh](#), [B.S. Rao](#), [M. Zuberi](#), [Y. Hayashi](#), [S. Kawakami](#), [P. Subramanian](#), [S. Raha](#), [S. Ahmad](#), [A. Oshima](#), [S. Shibata](#), [H. Kojima](#)

Physical Review D **2018**

<https://arxiv.org/pdf/1803.10499.pdf>

Statistical Analysis of Torus and Kink Instabilities in Solar Eruptions

Ju [Jing](#), [Chang Liu](#), [Jeongwoo Lee](#), [Hantao Ji](#), [Nian Liu](#), [Yan Xu](#), [Haimin Wang](#)

2018

<https://arxiv.org/pdf/1808.08924.pdf>

Cosmic ray short burst observed with the Global Muon Detector Network (GMDN) on June 22, 2015

K. [Munakata](#), [M. Kozai](#), [P. Evenson](#), [T. Kuwabara](#), [C. Kato](#), [M. Tokumaru](#), [M. Rockenbach](#), [A. Dal Lago](#), [R. S. Mendonca](#), [C. R. Braga](#), [N. J. Schuch](#), [H. K. Al Jassar](#), [M. M. Sharma](#), [M. L. Duldig](#), [J. E. Humble](#), [I. Sabbah](#), [J. Kota](#)

ApJ 862, 170 **2018**

<https://arxiv.org/pdf/1806.10601.pdf>
sci-hub.se/10.3847/1538-4357/aacdfc

The 2015 Summer Solstice Storm: one of the major geomagnetic storms of solar cycle 24 observed at ground level

C. R. A. [Augusto](#), [C. E. Navia](#), [M. N. de Oliveira](#), [A. A. Nepomuceno](#), [J. P. Raulin](#), [E. Tueros](#), [R. R. de Mendonça](#), [A. C. Fauth](#), [H. Vieira de Souza](#), [V. Kopenkin](#), [T. Sinzi](#)

Solar Phys. **2018**

<https://arxiv.org/pdf/1805.05277.pdf>

Unusual Cosmic Ray Variations During the Forbush Decreases of June 2015

E. [Samara](#), A. Smpontias, I. Lytrosyngounis, D. Lingri, H. Mavromichalaki, C. Sgouropoulos

[Solar Physics](#) April **2018**, 293:67

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1290-9.pdf>

Revealing evolution of nonthermal electrons in solar flares using 3D modeling

Gregory D. [Fleishman](#), [Gelu M. Nita](#), [Natsuha Kuroda](#), [Sabina Jia](#), [Kevin Tong](#), [Richard R. Wen](#), [Zhou Zhizhuo](#)

ApJ **2018**

<https://arxiv.org/pdf/1803.09847.pdf>

Pre-Eruptive Magnetic Reconnection within a Multi-Flux-Rope System in the Solar Corona

Arun Kumar **Awasthi**, Rui Liu, Haimin Wang, Yuming Wang, Chenglong Shen
ApJ **2018**
<https://arxiv.org/pdf/1803.04088.pdf>

Transient rotation of photospheric vector magnetic fields associated with a solar flare
Yan **Xu**, Wenda Cao, Kwangsu Ahn, Ju Jing, Chang Liu, Jongchul Chae, Nengyi Huang, Na Deng, Dale E. Gary, Haimin Wang
Nature Communications **2018**
<https://www.nature.com/articles/s41467-017-02509-w.pdf>
<https://arxiv.org/pdf/1801.03171.pdf>

Evolution of Photospheric Flow and Magnetic Fields Associated with The 2015 June 22 M6.5 Flare
Jiasheng **Wang**, Chang Liu, Na deng, Haimin Wang
2018
<https://arxiv.org/pdf/1801.03486.pdf>

Impulsive Increase of Galactic Cosmic Ray Flux Observed by IceTop
P. **Evenson**, IceCube Collaboration, P.S. Manganard, P. Muangha, R. Pyle, D. Ruffolo and A. Sáiz
Proc. of 35th International Cosmic Ray Conference 10-20 July, **2017** Bexco, Busan, Korea
<https://pos.sissa.it/301/133/pdf>

Three-dimensional Forward-fit Modeling of the Hard X-Ray and the Microwave Emissions of the 2015 June 22 M6.5 Flare
Natsuha **Kuroda**, Dale E. Gary, Haimin Wang, Gregory Fleishman, Gelu M. Nita, Ju Jing
2017
<https://arxiv.org/pdf/1712.07253.pdf>

The Photospheric Vortex Flows during a Solar Flare
Yi **Bi**, Jiayan Yang, Yunchun Jiang, Junchao Hong, Zhe Xu, Zhining Qu, and Kaifang Ji
2017 ApJL 849 L35

The direct relation between the duration of magnetic reconnection and the evolution of GOES light curves in solar flares
Jeffrey W **Reep**, Shin Toriumi
ApJ **2017**
<https://arxiv.org/pdf/1711.00422.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>

Structure and Dynamics of Cool Flare Loops Observed by the Interface Region Imaging Spectrograph
K. **Mikuła**¹, P. Heinzel², W. Liu², and A. Berlicki
2017 ApJ 845 30
<http://sci-hub.cc/10.3847/1538-4357/aa7d4e>

Witnessing a Large-scale Slipping Magnetic Reconnection along a Dimming Channel during a Solar Flare
Ju **Jing**, Rui Liu, Mark C. M. Cheung, Jeongwoo Lee, Yan Xu, Chang Liu, Chunming Zhu, Haimin Wang
2017
<https://arxiv.org/pdf/1706.01355.pdf>

High-resolution observations of flare precursors in the low solar atmosphere

Haimin **Wang**, Chang Liu, Kwangsu Ahn, Yan Xu, Ju Jing, Na Deng, Nengyi Huang, Rui Liu, Kanya Kusano, Gregory D. Fleishman, Dale E. Gary, Wenda Cao

Nature Astronomy 1, 0085 2017

<https://arxiv.org/pdf/1703.09866.pdf>

<http://www.nature.com/articles/s41550-017-0085>

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>

Flare differentially rotates sunspot on Sun's surface

Chang **Liu**, Yan Xu, Wenda Cao, Na Deng, Jeongwoo Lee, Hugh S. Hudson, Dale E. Gary, Jiasheng Wang, Ju Jing, Haimin Wang

Nature Communications 2016

<https://arxiv.org/pdf/1610.02969v1.pdf>

TRANSIENT GALACTIC COSMIC-RAY MODULATION DURING SOLAR CYCLE 24: A COMPARATIVE STUDY OF TWO PROMINENT FORBUSH DECREASE EVENTS

L.-L. **Zhao**^{1,2} and H. Zhang

2016 ApJ 827 13

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>

Unprecedented Fine Structure of a Solar Flare Revealed by the 1.6 m New Solar Telescope

Ju **Jing**, Yan Xu, Wenda Cao, Chang Liu, Dale Gary & Haimin Wang

Scientific Reports 6, Article number: 24319 2016

<http://www.nature.com/articles/srep24319#s2>

Transient Weakening of Earth's Magnetic Shield Probed by a Cosmic Ray Burst

P. K. **Mohanty**, K. P. Arunbabu, T. Aziz, S. R. Dugad, S. K. Gupta, B. Hariharan, P. Jagadeesan, A. Jain, S. D. Morris, B. S. Rao, Y. Hayashi, S. Kawakami, A. Oshima, S. Shibata, S. Raha, P. Subramanian, and H. Kojima
Phys. Rev. Lett. 117, 171101 – Published 20 October 2016

sci-hub.tw/10.1103/PhysRevLett.117.171101

Plasma and Magnetic Field Characteristics of Solar Coronal Mass Ejections in Relation to Geomagnetic Storm Intensity and Variability

Ying D. **Liu**, [Huidong Hu](#), [Rui Wang](#), [Zhongwei Yang](#), [Bei Zhu](#), [Yi A. Liu](#), [Janet G. Luhmann](#), [John D. Richardson](#)

ApJL 2015

<http://arxiv.org/pdf/1508.01267v1.pdf>

22-23 June - A series of CMEs hit Earth's magnetic field on June 22nd, producing a severe G4-class geomagnetic storm, Dst~-198 nT, сильный форбуш.

See http://www.swpc.noaa.gov/sites/default/files/images/u33/Rutledge_SWW_2016.pdf

Analysis of Cosmic Ray Fluxes at Different Stations during Geomagnetic Storms using Wavelet Based Approaches: Continuous Wavelet Transform and Multi-Resolution Analysis

Uga, CI ; Adhikari, B ; Teferi, D

GEOMAGNETISM AND AERONOMY Volume 63, Issue 6, Page 818-838, 2024

DOI 10.1134/S0016793223600418

SWASTi-CME: A physics-based model to study CME evolution and its interaction with Solar Wind

Prateek [Mayank](#), [Bhargav Vaidya](#), [Wageesh Mishra](#), [D. Chakrabarty](#)

ApJS 2023

<https://arxiv.org/pdf/2310.18219.pdf>

Properties of Forbush Decreases with AMS-02 Daily Proton Flux Data

Siqi [Wang](#)¹, Veronica Bindi¹, Cristina Consolandi¹, Claudio Corti¹, Christopher Light¹, Nikolay Nikonov¹, and Andrew Kuhlman¹

2023 ApJ 950 23

<https://iopscience.iop.org/article/10.3847/1538-4357/acca1b/pdf>

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>

HXR emission from an activated flux rope and subsequent evolution of an eruptive long duration solar flare

[Suraj Sahu](#), [Bhuwan Joshi](#), [Prabir K. Mitra](#), [Astrid M. Veronig](#), [V. Yurchyshyn](#)

ApJ 2020

<https://arxiv.org/pdf/2005.06221.pdf>

Chapter 10 - Geomagnetic Storms: First-Principles Models for Extreme Geospace Environment

Review

Natalia [Buzulukova](#)*†[Mei-Ching Fok](#)*[Alex Glocer](#)*[Colin Komar](#)*‡[Suk-Bin Kang](#)*[Steven Martin](#)*§[Chigomezyo M. Ngwira](#)*‡[Guan Le](#)*

In: Extreme Events in Geospace Origins, Predictability, and Consequences 2018, Pages 231-258

<http://sci-hub.tw/10.1016/B978-0-12-812700-1.00010-8>

The Evolution of Quasi-Separatrix Layer in Two Solar Eruptive Events

Kang [Kai-Feng](#), Yan Xiao-li, Xu Zhi, Wu Ning, Lin Jun

[Chinese Astronomy and Astrophysics](#) Volume 42, Issue 3 Pages 386-420 2018

<https://www.sciencedirect.com/journal/chinese-astronomy-and-astrophysics/vol/42/issue/3>

A Major Geoeffective CME from NOAA 12371: Initiation, CME–CME Interactions, and Interplanetary Consequences

Bhuwan [Joshi](#), M. Syed Ibrahim, A. Shanmugaraju, D. Chakrabarty

[Solar Physics](#) July 2018, 293:107

<http://sci-hub.se/http://link.springer.com/10.1007/s11207-018-1325-2>

The 2015 Summer Solstice Storm: one of the major geomagnetic storms of solar cycle 24 observed at ground level

C. R. A. [Augusto](#), [C. E. Navia](#), [M. N. de Oliveira](#), [A. A. Nepomuceno](#), [J. P. Raulin](#), [E. Tueros](#), [R. R. de Mendonça](#), [A. C. Fauth](#), [H. Vieira de Souza](#), [V. Kopenkin](#), [T. Sinzi](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1805.05277.pdf>

Unusual Cosmic Ray Variations During the Forbush Decreases of June 2015

E. [Samara](#), A. Smpontias, I. Lytrotyngounis, D. Lingri, H. Mavromichalaki, C. Sgouropoulos
[Solar Physics](#) April **2018**, 293:67
<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1290-9.pdf>

ОСОБЕННОСТИ ПОТОКОВ СОЛНЕЧНОГО ВЕТРА В ПЕРИОД 21-28 ИЮНЯ 2015 Г. КАК РЕЗУЛЬТАТ ВЗАИМОДЕЙСТВИЯ КОРОНАЛЬНЫХ ВЫБРОСОВ МАССЫ И РЕКУРРЕНТНЫХ ПОТОКОВ ИЗ КОРОНАЛЬНЫХ ДЫР

ШУГАЙ Ю.С.¹, СЛЕМЗИН В.А.², РОДЬКИН Д.Г.²

Косм. Исслед. Том: 55 Номер: 6 Год: **2017** Страницы: 399-406

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>

АНАЛИЗ ФОРБУШ-ЭФФЕКТА В ИЮНЕ 2015 Г. МЕТОДОМ СПЕКТРОГРАФИЧЕСКОЙ ГЛОБАЛЬНОЙ СЪЕМКИ

КРАВЦОВА М.В.¹, СДОБНОВ В.Е.¹

ИЗВЕСТИЯ РОССИЙСКОЙ АКАДЕМИИ НАУК. СЕРИЯ ФИЗИЧЕСКАЯ
Том: 81 Номер: 2 Год: **2017** Страницы: 196-198

По данным наземных измерений космических лучей (КЛ) на мировой сети станций методом спектрографической глобальной съемки исследован форбуш-эффект в июне 2015 г. При аппроксимации спектров вариаций степенной функцией от жесткости частиц в интервале 10–50 ГВ на фазе максимальной модуляции показатель спектра больше, чем на фазах спада и восстановления интенсивности КЛ.

The Spanish Space Weather Service SeNMEs. A case study on the Sun-Earth chain

J. [Palacios](#), C. Cid, A. Guerrero, E. Saiz, Y. Cerrato, M. Rodríguez-Bouza, I. Rodríguez-Bilbao, M. Herraiz, G. Rodríguez-Caderot
ASP Conference Series, **2016**, volume 504: Ground based solar observations in the space instrumentation era **2017**
<https://arxiv.org/pdf/1704.00684.pdf>

Analysis of the monitoring data of geomagnetic storm interference in the electrification system of a high-speed railway

Lianguang [Liu](#), Xiaoning Ge, Wei Zong, You Zhou,
Space Weather Volume 14, Issue 10 October **2016** Pages 754–763
<http://sci-hub.cc/doi/10.1002/2016SW001411>

TRANSIENT GALACTIC COSMIC-RAY MODULATION DURING SOLAR CYCLE 24: A COMPARATIVE STUDY OF TWO PROMINENT FORBUSH DECREASE EVENTS

L.-L. [Zhao](#)^{1,2} and H. Zhang
2016 ApJ 827 13

23 June

Unusual Cosmic Ray Variations During the Forbush Decreases of June 2015

E. [Samara](#), A. Smpontias, I. Lytrotyngounis, D. Lingri, H. Mavromichalaki, C. Sgouropoulos
[Solar Physics](#) April **2018**, 293:67
<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1290-9.pdf>

24 June

Fine structure of type III solar radio bursts from Langmuir wave motion in turbulent plasma

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

2021

<https://arxiv.org/pdf/2103.08424.pdf>

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>

EUHFORIA: European heliospheric forecasting information asset

Jens [Pomoell](#)^{1*} and S. Poedts²

J. Space Weather Space Clim. 2018, 8, A35

<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170062.pdf>

25 June - As expected, a CME hit Earth's magnetic field on June 24th. At first the impact had little effect, but now a **G2-class geomagnetic storm** is in progress as Earth passes through the CME's wake, Dst~-79, **новый фобуш**.

- **08:16: M7.9/3B LDE flare**, N09W42,II,IV, **S5~6400**, large asymmetric full **halo CME**, 2000 km/s (http://www.spaceweather.com/images2015/25jun15/cme_anim2.gif),

Мягкие протоны J10~6-10 pfu. Gamma

Solar radio bursts impact on the International GNSS Service Network during Solar Cycle 24

Manuel [Flores-Soriano](#)*

J. Space Weather Space Clim. 2024, 14, 32

<https://www.swsc-journal.org/articles/swsc/pdf/2024/01/swsc240021.pdf>

Cannibals in PARADISE: The Effect of Merging Interplanetary Shocks on Solar Energetic Particle Events

Antonio [Niemela](#)^{1,2}, Nicolas Wijsen¹, Angels Aran^{3,4}, Luciano Rodriguez², Jasmina Magdalenic^{1,2}, and Stefaan Poedts^{1,5}

2024 ApJL 967 L35

<https://iopscience.iop.org/article/10.3847/2041-8213/ad4c70/pdf>

SWASTi-CME: A physics-based model to study CME evolution and its interaction with Solar Wind

Prateek [Mayank](#), [Bhargav Vaidya](#), [Wageesh Mishra](#), [D. Chakrabarty](#)

ApJS 2023

<https://arxiv.org/pdf/2310.18219.pdf>

Turbulence in Sources of Decimetric Flare Continua

Marian [Karlický](#)

[Solar Physics](#) volume 298, Article number: 95 (2023)

<https://link.springer.com/content/pdf/10.1007/s11207-023-02188-5.pdf>

Radio bursts observed during solar eruptive flares and their schematic summary

Review

[Marian Karlický](#)

2023

<https://arxiv.org/pdf/2307.07144.pdf>

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>

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

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

Space Weather e2021SW002797 **2022**

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

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

Sizes and shapes of sources in solar metric radio bursts

[M. Gordovskyy](#), [E.P. Kontar](#), [D.L. Clarkson](#), [N. Chrysaphi](#), [P.K. Browning](#)

ApJ **2021**

<https://arxiv.org/pdf/2111.07777.pdf>

A Weak Fermi Gamma-ray Event Associated with a Halo CME and a Type II Radio Burst

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

Proceedings URSI GASS 2020 **2021**

<https://arxiv.org/ftp/arxiv/papers/2105/2105.01212.pdf>

Fine structures of solar radio bursts: origins and radio-wave propagation effects

[Nicolina Chrysaphi](#)

PhD **Thesis**, University of Glasgow, **2021**.

<https://arxiv.org/pdf/2103.13745.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>

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>

The evolution of coronal mass ejections in the inner heliosphere: Implementing the spheromak model with EUFORIA

C. **Verbeke**, J. Pomoell and S. Poedts

A&A 627, A111 (**2019**)

sci-hub.se/10.1051/0004-6361/201834702

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

Flame-like Ellerman Bombs and Their Connection to Solar UV Bursts

Yajie **Chen**, [Hui Tian](#), [Hardi Peter](#), [Tanmoy Samanta](#), [Vasyl Yurchyshyn](#), [Haimin Wang](#), [Wenda Cao](#), [Linghua Wang](#), [Jiansen He](#)

ApJL **2019**

<https://arxiv.org/pdf/1903.01981.pdf>

Frequency–Distance Structure of Solar Radio Sources Observed by LOFAR

Mykola [Gordovskyy](#)¹, Eduard Kontar², Philippa Browning¹, and Alexey Kuznetsov
2019 ApJ 873 48
<https://iopscience.iop.org/article/10.3847/1538-4357/ab03d8/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

Impacts of EUV Wavefronts on Coronal Structures in Homologous Coronal Mass Ejections

Rui [Liu](#), [Yuming Wang](#), [Jeongwoo Lee](#), [Chenglong Shen](#)

ApJ **2018**

<https://arxiv.org/pdf/1811.01326.pdf>

CME-driven shock and Type II solar radio burst band-splitting

Nicolina [Chrysaphi](#), [Eduard P. Kontar](#), [Gordon D. Holman](#), [Manuela Temmer](#)

ApJ **2018**

<https://arxiv.org/pdf/1810.08026.pdf>

Unusual Cosmic Ray Variations During the Forbush Decreases of June 2015

E. [Samara](#), A. Smpontias, I. Lytrosyngounis, D. Lingri, H. Mavromichalaki, C. Sgouropoulos

[Solar Physics](#) April **2018**, 293:67

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1290-9.pdf>

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

Nengyi [Huang](#)^{1,2}, Yan Xu^{1,2}, and Haimin Wang

2018 Res. Notes AAS **2** **7**

<http://iopscience.iop.org/article/10.3847/2515-5172/aaa602>

<https://arxiv.org/pdf/1801.04316.pdf>

ОСОБЕННОСТИ ПОТОКОВ СОЛНЕЧНОГО ВЕТРА В ПЕРИОД 21-28 ИЮНЯ 2015 Г. КАК РЕЗУЛЬТАТ ВЗАИМОДЕЙСТВИЯ КОРОНАЛЬНЫХ ВЫБРОСОВ МАССЫ И РЕКУРРЕНТНЫХ ПОТОКОВ ИЗ КОРОНАЛЬНЫХ ДЫР

ШУГАЙ Ю.С.^{✉1}, СЛЕМЗИН В.А.², РОДЬКИН Д.Г.²

Косм. Исслед. Том: 55 Номер: [6](#) Год: **2017** Страницы: 399-406

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>

Sudden Penumbra Reappearance and Umbral Motion Induced by an M7.9 Solar Flare

Zhe [Xu](#)^{1,2,3}, Yunchun Jiang^{1,3}, Jiayan Yang^{1,3}, Junchao Hong^{1,3}, and Haidong Li

2017 ApJL 840 L21

<http://iopscience.iop.org/sci-hub.cc/2041-8205/840/2/L21/>

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>

26 June

Predicting well-connected SEP events from observations of solar EUVs and energetic protons

Marlon [Núñez](#)^{1*}, Teresa Nieves-Chinchilla² and Antti Pulkkinen²

J. Space Weather Space Clim. **2019**, 9, A27

<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180069.pdf>

Energetics of magnetic transients in solar active region plage

L. P. [Chitta](#), [A. R. C. Sukarmadj](#), [L. Rouppe van der Voort](#), [H. Peter](#)

A&A **2019**

<https://arxiv.org/pdf/1902.01650.pdf>

On the generation of solar spicules and Alfvénic waves

Juan [Martínez-Sykora](#), [Bart De Pontieu](#), [Viggo H. Hansteen](#), [Luc Rouppe van der Voort](#), [Mats Carlsson](#), [Tiago M. D. Pereira](#)

2017

<https://arxiv.org/ftp/arxiv/papers/1710/1710.07559.pdf>

27 June

EUHFORIA: European heliospheric forecasting information asset

Jens [Pomoell](#)^{1*} and S. Poedts²

J. Space Weather Space Clim. **2018**, 8, A35

<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170062.pdf>

28 Jun

The Origin of Underdense Plasma Downflows Associated with Magnetic Reconnection in Solar Flares

[Chengcai Shen](#), [Bin Chen](#), [Katharine K. Reeves](#), [Sijie Yu](#), [Vanessa Polito](#), [Xiaoyan Xie](#)

2021

<https://arxiv.org/pdf/2111.11407.pdf>

29 June

Simultaneous transverse and longitudinal oscillations in a quiescent prominence triggered by a coronal jet

Qingmin [Zhang](#), [Dong Li](#), [Zongjun Ning](#)

ApJ **2017**

<https://arxiv.org/pdf/1711.00670.pdf>

30 June

Observation of bi-directional jets in a prominence^{*}

A. [Hillier](#)¹ and V. Polito^{2,3}

A&A 651, A60 (**2021**)

<https://www.aanda.org/articles/aa/pdf/2021/07/aa35774-19.pdf>

<https://doi.org/10.1051/0004-6361/201935774>

Observations of the Kelvin-Helmholtz instability driven by dynamic motions in a solar prominence

Andrew [Hillier](#), [Vanessa Polito](#)

ApJL **2018**

<https://arxiv.org/pdf/1808.02286.pdf>

1 July

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>

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>

2 Jul

A Simple Radial Gradient Filter for Batch-Processing of Coronagraph Images

Ritesh Patel, **Satabdwa Majumdar**, **Vaibhav Pant**, **Dipankar Banerjee**
Solar Phys. 2022
<https://arxiv.org/pdf/2201.13043.pdf>

5 July – a minor storm under the influence of a high speed stream associated with CH675, **фoрбyш..**

High-frequency dynamics of active region moss as observed by IRIS

Nancy **Narang**, **Vaibhav Pant**, **Dipankar Banerjee**, **Tom Van Doorselaere**
Front. Astron. Space Sci 2019
<https://arxiv.org/pdf/1905.00722.pdf>

7-10 July

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>

8 July

Automated Segmentation of High-Resolution Photospheric Images of Active Regions

Meng **Yang**, Yu Tian, Changhui Rao
Solar Physics February 2018, 293:15
<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1236-7.pdf>

9 July

On Solar Recurrent Coronal Jets: Coronal Geysers as Sources of Electron Beams and Interplanetary Type-III Radio Bursts

Alin Razvan **Paraschiv** and Alina Donea
2019 ApJ 873 110
<https://doi.org/10.3847/1538-4357/ab04a6>
<https://arxiv.org/pdf/1903.04682.pdf>

Untwisting Jets Related to Magnetic Flux Cancellation

Jiajia **Liu**, **Robert Erdélyi**, **Yuming Wang**, **Rui Liu**
2018 ApJ 852 10
<https://arxiv.org/pdf/1711.06066.pdf>
<http://iopscience.iop.org/article/10.3847/1538-4357/aa992d/pdf>

9-10 Jul

Modeling a Coronal Mass Ejection from an Extended Filament Channel. I. Eruption and Early Evolution

[Benjamin J. Lynch](#), [Erika Palmerio](#), [C. Richard DeVore](#), [Maria D. Kazachenko](#), [Joel T. Dahlin](#), [Jens Pomoell](#), [Emilia K. J. Kilpua](#)
ApJ **2021**
<https://arxiv.org/pdf/2104.08643.pdf>

10 July

Solar jets observed with the Interface Region Imaging Spectrograph (IRIS)

[Brigitte Schmieder](#), [Reetika Joshi](#), [Ramesh Chandra](#)
Advances in Space Research **2021**
<https://arxiv.org/pdf/2111.09002.pdf>

A Model for Coronal Inflows and In/Out Pairs

[Benjamin J. Lynch](#)
ApJ **2020**
<https://arxiv.org/pdf/2010.13959.pdf>

Cool and hot emission in a recurring active region jet

Sargam M. [Mulay](#), Giulio Del Zanna, and Helen Mason
uksp_nug #108 **2020**
<http://www.uksolphys.org/uksp-nugget/108-cool-and-hot-emission-in-a-recurring-active-region-jet/>

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>

Untwisting Jets Related to Magnetic Flux Cancellation

Jiajia [Liu](#)^{1,2}, Robert Erdélyi^{1,2}, Yuming Wang^{3,2}, and Rui Liu^{3,2}
2018 ApJ 852 10
<https://arxiv.org/pdf/1711.06066.pdf>
<http://iopscience.iop.org/article/10.3847/1538-4357/aa992d/pdf>

Cool and hot emission in a recurring active region jet*

Sargam M. [Mulay](#), Giulio Del Zanna and Helen Mason
A&A 606, A4 (**2017**)
<https://www.aanda.org/articles/aa/pdf/2017/10/aa30429-17.pdf>

10-12 July

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

[Stanislavsky](#) A., Konovalenko A., Koval A., Volvach Ya.
SUN and GEOSPHERE Vol.13, No.1 - **2018** p. 21-24
http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG_v13_No1_2018-pp-21-24.pdf

Solar Drift-Pair Bursts

[Stanislavsky](#) A. 1,2, Volvach Ya. 1, Konovalenko A. 1, Koval A. 3
Sun and Geosphere, **2017**; 12/2: 99 -103
http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG_v12_No2_2017-pp-99-103.pdf

Comparative analysis of decametre 'drift pair' bursts observed in 2002 and 2015

[Volvach](#), Ya.S., [Stanislavsky](#) A.A., [Konovalenko](#) A.A., [Koval](#) A.A., and [Dorovsky](#) V.V.:
2016, Advanced in Astronomy and Space Physics 6, 24. doi: 10.17721/2227-1481.6.24-27
<http://aasp.kiev.ua/volume6/024-027-Volvach.pdf>

11-13 July

The Efficiency of Coronal Mass Ejection With Different IMF Preconditions on the Production of Megaelectronvolt Electron Content in the Outer Radiation Belt

C.-J. [Yuan Q.-G. Zong](#)

JGR [Volume124, Issue5](#) May 2019 Pages 3222-3235

[sci-hub.se/10.1029/2018JA026263](https://doi.org/10.1029/2018JA026263)

12 July

Dispersively Formed Quasi-Periodic Fast Magnetosonic Wavefronts Due to the Eruption of a Nearby Mini-filament

Yuandeng [Shen](#), [Tengfei Song](#), [Yu Liu](#)

MNRAS 2018

<https://arxiv.org/pdf/1803.01125.pdf>

13 July

High-resolution Observations of Halpha Spectra with a Subtractive Double Pass

C. [Beck](#), [R. Rezaei](#), [D. Prasad Choudhary](#), [S. Gosain](#), [A. Tritschler](#), [R.E. Louis](#)

Solar Phys. 2017

<https://arxiv.org/pdf/1712.07077.pdf>

14 July

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>

The Bi-directional Moving Structures in a Coronal Bright Point

Dong [Li](#), Zongjun Ning, Yingna Su

Ap&SS 2016

<http://arxiv.org/pdf/1608.01534v1.pdf>

July 14-Aug 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](https://doi.org/10.3847/1538-4357/ab2add)

19 July – утро: эрупция NW волокна

- >07 UT: **заметная эрупция прилибового SW волокна**, C2.1 LDE, без радио, без протонов, значительный CME

Sympathetic Quiet and Active Region Filament Eruptions

[Kostadinka Koleva](#), [Pooja Devi](#), [Ramesh Chandra](#), [Reetika Joshi](#), [Peter Duchlev](#), [Momchil Dechev](#)

Solar Phys. 2022

<https://arxiv.org/pdf/2202.08157.pdf>

24-29 Jul

Nature of helicity injection in non-erupting solar active regions

[P. Vemareddy](#)

MNRAS 2022

<https://arxiv.org/pdf/2208.03228>

27 Jul

High Frequency Waves in Chromospheric Spicules

[W. Bate](#), [D. B. Jess](#), [V. M. Nakariakov](#), [S. D. T. Grant](#), [S. Jafarzadeh](#), [M. Stangalini](#), [P. H. Keys](#), [D. J. Christian](#), [F. P. Keenan](#)

ApJ 2022

<https://arxiv.org/pdf/2203.04997.pdf>

31 July

Modern Faraday Rotation Studies to Probe the Solar Wind

Jason [Kooi](#), David Wexler, Elizabeth Jensen, Megan Kenny, Teresa Nieves-Chinchilla, Lynn Wilson III, Brian Wood, Lan Jian, Shing Fung, Alexei Pevtsov, Nat Gopalswamy, and Ward Manchester
Front. Astron. Space Sci., 9:841866. 2022 |

<https://doi.org/10.3389/fspas.2022.841866>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.841866/full>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.841866/pdf>

VLA Measurements of Faraday Rotation Through a Coronal Mass Ejection Using Multiple Lines of Sight

[Jason E. Kooi](#), [Madison L. Ascione](#), [Lianis V. Reyes-Rosa](#), [Sophia K. Rier](#) & [Mohammad Ashas](#)
Solar Physics volume 296, Article number: 11 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01755-4.pdf>

1 Aug

Observations of Ellerman bomb emission features in He I D3 and He I 10830 Å

Tine [Libbrecht](#), Jayant Joshi, Jaime de la Cruz Rodríguez, Jorrit Leenaarts, Andrés Asensio Ramos
A&A 2016

<https://arxiv.org/pdf/1610.01321v1.pdf>

3 Aug

High-Resolution Observation and Magnetic Modeling of a Solar Minifilament: the Formation, Eruption and Failing Mechanisms

[Weilin Teng](#), [Yingna Su](#), [Rui Liu](#), [Jialin Chen](#), [Yanjie Liu](#), [Jun Dai](#), [Wenda Cao](#), [Jinhua Shen](#), [Haisheng Ji](#)

ApJ Volume 970, Issue 2, id.100, 2024

<https://arxiv.org/pdf/2405.17303>

3-6 Aug

Photospheric Magnetic Fields of the Trailing Sunspots in Active Region NOAA 12396

[M. Verma](#), [H. Balthasar](#), [C. Denker](#), [F. Böhm](#), [C. E. Fischer](#), [C. Kuckein](#), [S. J. González Manrique](#), [M. Sobotka](#), [N. Bello González](#), [A. Diercke](#), [T. Berkefeld](#), [M. Collados](#), [A. Feller](#), [A. Hofmann](#), [A. Lagg](#), [H. Nicklas](#), [D. Orozco Suárez](#), [A. Pastor Yabar](#), [R. Rezaei](#), [R. Schlichenmaier](#), [D. Schmidt](#), [W. Schmidt](#), [M. Sigwarth](#), [S. K. Solanki](#), [D. Soltau](#), [J. Staude](#), [K. G. Strassmeier](#), [R. Volkmer](#), [O. von der Lühe](#), [T. Waldmann](#)

"Solar Polarization Workshop 8", ASP Proceedings, Luca Belluzzi (eds.)

2018

<https://arxiv.org/pdf/1805.07752.pdf>

5 Aug

Evidence of Twisting and Mixed-polarity Solar Photospheric Magnetic Field in Large Penumbra Jets: IRIS and Hinode Observations

Sanjiv K. [Tiwari](#), [Ronald L. Moore](#), [Bart De Pontieu](#), [Theodore D. Tarbell](#), [Navdeep K. Panesar](#), [Amy R. Winebarger](#), [Alphonse C. Sterling](#)

ApJ 2018

<https://arxiv.org/pdf/1811.09554.pdf>

Critical magnetic field strengths for solar coronal plumes in quiet regions and coronal holes?

Ellis A. [Avallone](#), [Sanjiv K. Tiwari](#), [Navdeep K. Tiwari](#), [Ronald L. Moore](#), [Amy Winebarger](#)

ApJ 2018

<https://arxiv.org/pdf/1805.11188.pdf>

7 Aug

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

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

ApJ 2019

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

High-resolution Observations of Flares in an Arch Filament System

Yingna [Su](#)^{1,2}, Rui Liu^{3,4}, Shangwei Li^{1,5}, Wenda Cao^{6,7}, Kwangsu Ahn⁶, and Haisheng Ji

2018 ApJ 855 77

<http://sci-hub.tw/http://iopscience.iop.org/0004-637X/855/2/77/>

9 Aug

Measurement of Vector Magnetic Field in a Flare kernel with a Spectropolarimetric Observation in He I 10830 Å

Tetsu [Anan](#), [Takurou Yoneya](#), [Kiyoshi Ichimoto](#), [Satoru Ueno](#), [Daikou Shiota](#), [Satoshi Nozawa](#), [Shinsuke Takasao](#), [Tomoko Kawate](#)

PASJ (Hida topical issue)

2018

12 Aug - A **filament** in the SW quadrant of the sun erupted at around 13:32. A partial halo CME was observed after a complex chain of filament eruptions in the southwest quadrant. The first eruption began after 14h UTC and likely triggered a second eruption close to CH682.

http://www.spaceweather.com/images2015/14aug15/cme_anim.gif?PHPSESSID=tvoro73ap38jio58sc0enforq6

13-28 Aug

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>

15-16 Aug - geomagnetic storm, Dst~ -89. A solar wind shock was observed at SOHO at 07:49 UT, the arrival of the CME observed on **August 12**.

16 Aug

Multi-wavelength Spectral Analysis of Ellerman Bombs Observed by FISS and IRIS

Jie [Hong](#), M. D. Ding, Wenda Cao

ApJ 2017

<https://arxiv.org/pdf/1703.04268.pdf>

17 Aug

Can Injection Model Replenish the Filaments in Weak Magnetic Environment?

Peng [Zou](#), [Chaowei Jiang](#), [Fengsi Wei](#), [Wenda Cao](#)

Research in Astronomy and Astrophysics 2019

<https://arxiv.org/pdf/1901.00659.pdf>

19 Aug

On the Magnetic Nature of Quiet-Sun Chromospheric Grains

María Jesús Martínez **González**^{1,2}, Tanausú del Pino Alemán^{1,2}, Adur Pastor Yabar³, Carlos Quintero Noda^{1,2}, and Andrés Asensio Ramos^{1,2}
2023 ApJL 955 L40
<https://iopscience.iop.org/article/10.3847/2041-8213/acfa97/pdf>

Flare-productive active regions

Review

Shin **Toriumi**, [Haimin Wang](#)

Living Reviews in Solar Physics 2019

<https://arxiv.org/pdf/1904.12027.pdf>

Various Local Heating Events in the Earliest Phase of Flux Emergence

Shin **Toriumi**, Yukio Katsukawa, Mark C.M. Cheung

ApJ 2017

<https://arxiv.org/pdf/1701.01446v1.pdf>

21 Aug

Modern Faraday Rotation Studies to Probe the Solar Wind

Jason **Kooi**, David Wexler, Elizabeth Jensen, Megan Kenny, Teresa Nieves-Chinchilla, Lynn Wilson III, Brian Wood, Lan Jian, Shing Fung, Alexei Pevtsov, Nat Gopalswamy, and Ward Manchester
Front. Astron. Space Sci., 9:841866. 2022 |

<https://doi.org/10.3389/fspas.2022.841866>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.841866/full>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.841866/pdf>

Evolution of the Toroidal Flux of CME Flux Ropes during Eruption

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

The Innovation 2020

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

Magnetic separatrix as the source region of the plasma supply for an active-region filament

P. **Zou**, C. Fang, P. F. Chen, K. Yang, Wenda Cao

ApJ 2017

<https://arxiv.org/pdf/1701.01526v1.pdf>

Measuring the magnetic field of coronal mass ejections near the Sun using pulsars,

[Howard](#), T.A., K. Stovall, Dowell, J., G. Taylor, and S. White,
Astrophys. J., 831 208, 2016.

<http://sci-hub.cc/10.3847/0004-637X/831/2/208>

22 Aug ~06:40 2B flare

Implications of Flat Optically Thick Microwave Spectra in Solar Flares for Source Size and Morphology

[Shaheda Begum Shaik](#), [Dale E. Gary](#)

ApJ 2021

<https://arxiv.org/pdf/2107.00192.pdf>

Trends and Characteristics of High-Frequency Type II Bursts Detected by CALLISTO Spectrometers

[A.C.Umuhire](#) (1), [J.Uwamahoro](#) (2), [K. Sasikumar Raja](#) (3), [A.Kumar](#) (4), [C.Monstein](#) (5)

Advances In Space Research 2021

<https://arxiv.org/pdf/2106.09310.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>

An Event-Based Verification Scheme for the Real-Time Flare Detection System at Kanzelhöhe Observatory

W. Pötzi, M. Veronig, M. Temmer

Solar Physics June 2018, 293:94

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1312-7.pdf>

Muon Excess at Sea Level during the Progress of a Geomagnetic Storm and High Speed Stream Impact Near the Time of Earth's Heliospheric Sheet Crossing

C. R. A. Augusto, C. E. Navia, M. N. de Oliveira, A. A. Nepomuceno, V. Kopenkin, T. Sinzi

Solar Phys. 2017

<https://arxiv.org/pdf/1706.00775.pdf>

Ground-based Observations of the Solar Sources of Space Weather (Invited Review)

Astrid M. Veronig, Werner Pötzi

"Ground-based Solar Observations in the Space Instrumentation Era", Proceedings of the Coimbra Solar Physics Meeting 2015, ASP Conference Series, Eds. I. Dorotovic, C. Fischer, and M. Temmer; 2016

<http://arxiv.org/pdf/1602.02721v1.pdf>

23 Aug

The Birth of a Jet-driven Twin CME and Its Deflection from Remote Magnetic Fields

Yadan Duan, Yuandeng Shen, Hechao Chen, Hongfei Liang

ApJ 2019

<https://arxiv.org/pdf/1907.07310.pdf>

24 Aug

Implications of Flat Optically Thick Microwave Spectra in Solar Flares for Source Size and Morphology

Shaheda Begum Shaik, Dale E. Gary

ApJ 2021

<https://arxiv.org/pdf/2107.00192.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://arxiv.org/abs/1904.00018)

<https://www.frontiersin.org/articles/10.3389/fspas.2019.00018/full>

³He-rich Solar Energetic Particles from Sunspot Jets

Radoslav Bučík^{1,2}, Mark E. Wiedenbeck³, Glenn M. Mason⁴, Raúl Gómez-Herrero⁵, Nariaki V. Nitta⁶, and Linghua Wang⁷

2018 ApJL 869 L21

[sci-hub.tw/10.3847/2041-8213/aaf37f](https://arxiv.org/abs/1812.07735)

<https://arxiv.org/pdf/1812.07735.pdf>

The eruption of a small-scale emerging flux rope as the driver of an M-class flare and a coronal mass ejection

X.L. [Yan](#), C.W. Jiang, Z.K. Xue, [J.C. Wang](#), [E.R. Priest](#), [L.H. Yang](#), [D.F. Kong](#), [W.D. Cao](#), [H.S. Ji](#)

ApJ **2017**

<https://arxiv.org/pdf/1707.00073.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>

25 Aug

Spectropolarimetric Imaging of Metric Type III Solar Radio Bursts

M. M. [Rahman](#), [Iver H. Cairns](#) & [Patrick I. McCauley](#)

[Solar Physics](#) volume 295, Article number: 51 (**2020**)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01616-0.pdf>

Solar jet-coronal hole collision and a related coronal mass ejection

Ruisheng [Zheng](#), Yao Chen, Guohui Du, Chuanyang Li

ApJL **2016**

<http://arxiv.org/pdf/1602.06493v1.pdf>

25-28 Aug

Predicting the geoeffective properties of coronal mass ejections: current status, open issues and path forward **Review**

A. [Vourlidas](#), [S. Patsourakos](#), and [N. P. Savani](#)

Philosophical Transactions of the Royal Society A v. 377 [Issue 2148](#) Article ID:20180096 **2019 File**

<https://royalsocietypublishing.org/doi/pdf/10.1098/rsta.2018.0096>

25-29 Aug

Muon Excess at Sea Level during the Progress of a Geomagnetic Storm and High Speed Stream Impact Near the Time of Earth's Heliospheric Sheet Crossing

C. R. A. [Augusto](#), C. E. Navia, M. N. de Oliveira, [A. A. Nepomuceno](#), [V. Kopenkin](#), [T. Sinzi](#)

[Solar Phys.](#) **2017**

<https://arxiv.org/pdf/1706.00775.pdf>

26 Aug – 13:53: LDE, C9.5; A CME was observed off the west limb from 20:36 UT in LASCO C2 imagery. This was likely associated with an **extensive filament eruption** to the north and northeast of AR 12403.

~20 UT: большая трансэкваториальная центрально-западная эрупция

26-28 Aug – геомагнитная буря (Dst~-100), форбуш. Источник? For the third day in a row, Earth's magnetic field is simmering with G1-class geomagnetic storms.

27 Aug

Impulsive radio and hard X-ray emission from an M-class flare

Ping [Zhang](#)^{1,2,4}, Yang Guo³, Lu Wang^{1,2} and Siming Liu

[A&A](#) 615, A48 (**2018**)

<https://www.aanda.org/articles/aa/pdf/2018/07/aa31274-17.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>

**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

27-28 Aug

Geomagnetic storm forecasting service StormFocus: 5 years online
Tatiana **Podladchikova**, Anatoly Petrukovich and Yuri Yermolaev
J. Space Weather Space Clim. **2018**, 8, A22
<https://www.swsc-journal.org/articles/swsc/pdf/2018/01/swsc170027.pdf>

28 Aug – ~06:30: II тип на нашем спектре

A solar flare disturbing a light wall above a sunspot light bridge
Yijun **Hou**, Jun Zhang, Ting Li, Shuhong Yang, Leping Li, Xiaohong Li
2016
<http://arxiv.org/pdf/1609.05412v1.pdf>

30 Aug

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>

30 Aug – 3 September

The Na I and Sr II Resonance Lines in Solar Prominences

Goetz **Stellmacher**, Eberhard Wiehr
Solar Phys. **2017**
<https://arxiv.org/pdf/1705.02475.pdf>

31 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>

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>

1 September

Dynamics of photospheric magnetic flux distribution and variations in solar RVs -- a study using HARPS-N solar and SDO observations

[Anisha Sen](#), [S.P. Rajaguru](#)
ApJ **2023**
<https://arxiv.org/pdf/2309.05428.pdf>

NuSTAR hard X-ray observation of a sub-A class solar flare

Lindsay [Glesener](#), [Sa"m Krucker](#), [Iain G. Hannah](#), [Hugh Hudson](#), [Brian W. Grefenstette](#), [Stephen M. White](#), [David M. Smith](#), [Andrew J. Marsh](#)

ApJ 2017

<https://arxiv.org/pdf/1707.04770.pdf>

2 Sept

Comparison of theoretical and observed $\text{Ca}^{\text{II}}\text{H\&K}$ Stokes profiles in quiet regions at the centre of the solar disc

Jan [Jurcak](#), [Jiri Stepan](#), [Javier Trujillo Bueno](#), [Michele Bianda](#)

A&A 2018

<https://arxiv.org/pdf/1808.09470.pdf>

3 September

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>

CLASP/SJ Observations of Rapid Time Variations in the $\text{Ly}\alpha$ Emission in a Solar Active Region

Shin-nosuke [Ishikawa](#)¹, Masahito Kubo², Yukio Katsukawa², Ryouhei Kano², Noriyuki Narukage², Ryohko Ishikawa², Takamasa Bando², Amy Winebarger³, Ken Kobayashi³, Javier Trujillo Bueno⁴

2017 ApJ 846 127

Discovery of Scattering Polarization in the Hydrogen Lyman- α Line of the Solar Disk Radiation

R. [Kano](#), J. Trujillo Bueno, A. Winebarger, F. Auchère, N. Narukage, R. Ishikawa, K. Kobayashi, T. Bando, Y. Katsukawa, M. Kubo, S. Ishikawa, G. Giono, H. Hara, Y. Suematsu, T. Shimizu, T. Sakao, S. Tsuneta, K. Ichimoto, M. Goto, L. Belluzzi, J. Štěpán, A. Asensio Ramos, R. Manso Sainz, P. Champey, J. Cirtain, B. De Pontieu, R. Casini, M. Carlsson

Astrophysical Journal Letters, Volume 839, Number 1, L10, 2017

<https://arxiv.org/pdf/1704.03228.pdf>

4 Sept - A magnetic **filament** snaking across the sun's southern hemisphere erupted during the late hours of Sept. 4th (starting from approx. 18h UT). CME

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>

6 Sept

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>

7-8 Sept – **геомагнитная буря** ($\text{Dst}^{\sim}-(76-77)$), **форбуш**; начало - under the influence of a high speed stream from CH687; дальше (*при северной B_z ?*) - a CME associated with a large filament eruption in the southeast quadrant on September 4.

8 Sept

Statistical Approach on Differential Emission Measure of Coronal Holes using the CATCH Catalog
Stephan G. [Heinemann](#), [Jonas Saqri](#), [Astrid M. Veronig](#), [Stefan J. Hofmeister](#) & [Manuela Temmer](#)
[Solar Physics](#) volume 296, Article number: 18 (2021)

<https://arxiv.org/pdf/2102.13396.pdf>

<https://link.springer.com/content/pdf/10.1007/s11207-020-01759-0.pdf>

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>

8-10 September

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>

14 Sept

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>

16 Sept

The magnetic topology of the inverse Evershed flow

A. [Prasad](#), M. Ranganathan, C. Beck, D. P. Choudhary and Q. Hu
[A&A](#) 662, A25 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/06/aa42585-21.pdf>

Fine structure of type III solar radio bursts from Langmuir wave motion in turbulent plasma

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

2021

<https://arxiv.org/pdf/2103.08424.pdf>

Solar type III radio burst time characteristics at LOFAR frequencies and the implications for electron beam transport

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

[A&A](#) 2018

<https://arxiv.org/pdf/1802.01507.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

17 September

Inference of magnetic fields in the very quiet Sun

[M. J. Martínez](#) [González](#), [A. Pastor Yabar](#), [A. Lagg](#), ...

A&A 2018
<https://arxiv.org/pdf/1804.10089.pdf>

18 Sept - A CME was observed off the south pole and parts of the southwest and southeast limbs after the C2 LDE in AR 12415, S21W10.

http://www.spaceweather.com/images2015/19sep15/cme_anim2.gif?PHPSESSID=om35p5to1bkjh0a1men7qnull7

A Statistical Study of the IRIS Observational Signatures of Nanoflares and Non-thermal Particles
[Kyuhyoun Cho](#), [Paola Testa](#), [Bart De Pontieu](#), [Vanessa Polito](#)

ApJ 2022
<https://arxiv.org/pdf/2211.06832.pdf>

Spectropolarimetric Imaging of Metric Type III Solar Radio Bursts

M. M. [Rahman](#), [Iver H. Cairns](#) & [Patrick I. McCauley](#)
[Solar Physics](#) volume 295, Article number: 51 (2020)
<https://link.springer.com/content/pdf/10.1007/s11207-020-01616-0.pdf>

Fast Inversion of Solar Ca II Spectra in Non-Local Thermodynamic Equilibrium

C. [Beck](#), [S. Gosain](#), [C. Kiessner](#)
ApJ 2019
<https://arxiv.org/pdf/1904.11843.pdf>

19 September

Characterization of the umbra-penumbral boundary by the vertical component of the magnetic field -- Analysis of ground-based data from the GREGOR Infrared Spectrograph

P. [Lindner](#), [R. Schlichenmaier](#), [N. Bello González](#)

A&A 2020
<https://arxiv.org/pdf/2004.09956.pdf>

20 Sept – геобуря, Dst ~-75 due to the influence of a coronal hole high speed stream and the arrival of a coronal mass ejection from 18 Sep.

- ~06-07: южная/центральная эрупция

- 18:03: LDE вспышка M2.1/2N, S22W50, AR 2415 и рядом волокно, эрупция, partial

haloCME, II тип (1), **небольшие мягкие протоны**

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>

Imaging Spectroscopy of CME-Associated Solar Radio Bursts

[Sherry Chhabra](#), [Dale E. Gary](#), [Gregg Hallinan](#), [Marin M. Anderso](#), [Bin Chen](#), [Lincoln J. Greenhill](#), [Danny C. Price](#)

ApJ 2020
<https://arxiv.org/pdf/2011.06073.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>

21 September

Type III Solar Radio Burst Source Region Splitting Due to a Quasi-Separatrix Layer

Patrick I. [McCauley](#), [Iver H. Cairns](#), [John Morgan](#), [Sarah E. Gibson](#), [James C. Harding](#), [Colin Lonsdale](#), [Divya Oberoi](#)

ApJ 2017

<https://arxiv.org/pdf/1711.04930.pdf>

Observation of a Short Period Quasi-Periodic Pulsation in Solar X-ray, Microwave and EUV Emissions

Pankaj [Kumar](#), Valery M. Nakariakov, Kyung-Suk Cho

ApJ 2017

<https://arxiv.org/pdf/1701.02159v1.pdf>

21-23 September

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 September

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>

24-30 Sep

Implications of Flat Optically Thick Microwave Spectra in Solar Flares for Source Size and Morphology

[Shaheda Begum Shaik](#), [Dale E. Gary](#)

ApJ 2021

<https://arxiv.org/pdf/2107.00192.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>

26 September

Photospheric Shear Flows in Solar Active Regions and Their Relation to Flare Occurrence

Sung-Hong [Park](#), [Jordan A. Guerra](#), [Peter T. Gallagher](#), [Manolis K. Georgoulis](#), [D. Shaun Bloomfield](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1807.07714.pdf>

27 Sept

Deep Learning–based Solar Flare Forecasting Model. III. Extracting Precursors from EUV Images

Dezhi [Sun](#)^{1,2}, Xin Huang^{3,1}, Zhongrui Zhao^{1,2}, and Long Xu¹

2023 ApJS 266 8

<https://iopscience.iop.org/article/10.3847/1538-4365/acc248/pdf>

Spectropolarimetric Inversions of the Ca ii 8542 Å Line in an M-class Solar Flare

D. **Kuridze**^{1,2,3}, V. M. J. Henriques^{2,4,5}, M. Mathioudakis², L. Rouppe van der Voort^{4,5}, J. de la Cruz Rodríguez⁶, and M. Carlsson
2018 ApJ 860 10 DOI [10.3847/1538-4357/aac26d](https://doi.org/10.3847/1538-4357/aac26d)

28 Sept – Region 2423 (S09W67) produced an **impulsive M3.6/SF flare** at 03:55
- Region 2422 (S23W28) produced an **impulsive M7/1B flare** at 14:58, S15~180

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>

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

Searching for rapid pulsations in solar flare X-ray data

[Andrew R. Inglis](#), [Laura A. Hayes](#)

ApJ 2024

<https://arxiv.org/pdf/2406.07372>

First Solar Radio Burst Observations by the Mexican Array Radio Telescope (MEXART) at 140 MHz

[E. Huipe-Domratcheva](#), [V. De la Luz](#), [G. A. Casillas-Perez](#), [J. C. Mejia-Ambriz](#), [E. Perez-Leon](#), [J. A. Gonzalez-Esparza](#), [C. Monstein](#) & [W. Reeve](#)

Solar Physics volume 297, Article number: 9 (2022)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01916-z.pdf>

First Joint Observations of the Space Weather Events over Mexico

V. [De la Luz](#), [J.A González-Esparza](#), [M.A. Sergeeva](#), [P. Corona-Romero](#), [L.X. González](#), [J. Mejía-Ambriz](#), [J.F. Valdés-Galicia](#), [E. Aguilar-Rodríguez](#), [M. Rodríguez-Martínez](#), [E. Romero-Hernández](#), [E. Andrade](#), [P. Villanueva](#), [E. Huipe-Domratcheva](#), [G. Cifuentes](#), [E. Hernandez](#), [C. Monstein](#)

Annales Geophysicae (ANGEO) 2018

<https://arxiv.org/pdf/1808.07425.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

29-30 September

Surge-like oscillations above sunspot light bridges driven by magnetoacoustic shocks

Jingwen [Zhang](#), Hui Tian, Jiansen He, Linghua Wang

ApJ 2017

<https://arxiv.org/pdf/1702.08585.pdf>

30 Sept - >05 UT: near the **west limb** as AR 12423 continued to be active and seemed to trigger an **extensive filament eruption**; a wide and well defined **CME**

- В конце дня **небольшие мягкие протоны**

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>

1 Oct

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>

2 Oct

Comparison of damping models for kink oscillations of coronal loops

Yu [Zhong](#),¹ Dmitrii Y. Kolotkov ,^{1,2} Sihui Zhong¹ and Valery M. Nakariakov

Monthly Notices of the Royal Astronomical Society, Volume 525, Issue 4, 2023, Pages 5033–5040,

<https://doi.org/10.1093/mnras/stad2598>

<https://watermark.silverchair.com/stad2598.pdf>

https://warwick.ac.uk/fac/sci/physics/research/cfsa/people/valery/zhong_y_23.pdf

An overview of HMI off-disk flare observations

[Dennis Fremstad](#), [Juan Camilo Guevara Gómez](#), [Hugh Hudson](#), [Juan Carlos Martínez Oliveros](#)

A&A 2023

<https://arxiv.org/pdf/2302.13632.pdf>

Solar Flare Effects on the Earth's Lower Ionosphere

[Laura A. Hayes](#), [Oscar S.D. O'Hara](#), [Sophie A. Murray](#), [Peter T. Gallagher](#)

Solar Phys. 2021

<https://arxiv.org/pdf/2109.06558.pdf>

3 Oct

Magnetic Imaging of the Outer Solar Atmosphere (MImOSA): Unlocking the driver of the dynamics in the upper solar atmosphere **Review**

[H. Peter](#), [E. Alsina Ballester](#), [V. Andretta](#), [F. Auchere](#), [L. Belluzzi](#), [A. Bemporad](#), [D. Berghmans](#), [E. Buchlin](#), [A. Calcines](#), [L.P. Chitta](#), [K. Dalmasse](#), [T. del Pino Aleman](#), [A. Feller](#), [C. Froment](#), [R. Harrison](#), [M. Janvier](#), [S. Matthews](#), [S. Parenti](#), [D. Przybylski](#), [S.K. Solanki](#), [J. Stepan](#), [L. Teriaca](#), [J. Trujillo Bueno](#)

Experimental Astronomy (on 28. Jul. 2020). 2021

Based on a proposal submitted in response to a call for white papers in the Voyage 2050 long-term plan in the ESA science programme.

<https://arxiv.org/pdf/2101.01566.pdf>

5 Oct

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>

7 Oct – **геомагнитная буря** от CIR, associated with CH694, **Dst~-126**

Chapter 8 - An Overview of Science Challenges Pertaining to Our Understanding of Extreme Geomagnetically Induced Currents

Chigomezyo M. [Ngwira](#)*† [Antti A. Pulkkinen](#)†

In: [Extreme Events in Geospace](#) Origins, Predictability, and Consequences **2018**, Pages 187-208
<http://sci-hub.tw/10.1016/B978-0-12-812700-1.00008-X>

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

S. [Watari](#)

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

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

9 Oct

Synoptic solar observations of the Solar Flare Telescope focusing on space weather

[Yoichiro Hanaoka](#), [Takashi Sakurai](#), [Ken'ichi Otsuji](#), [Isao Suzuki](#), [Satoshi Morita](#)

[Journal of Space Weather and Space Climate](#) **2020**

<https://arxiv.org/pdf/2007.14054.pdf>

14 Oct

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>

15 Oct

Energy partition in two M-class circular-ribbon flares

Q. M. [Zhang](#), [J. X. Cheng](#), [L. Feng](#), [Y. Su](#), [L. Lu](#), [Y. Huang](#), [D. Li](#), [T. H. Zhou](#), [J. L. Chen](#)

[ApJ](#) **2019**

<https://arxiv.org/pdf/1908.02685.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>

High-resolution Observations of Sympathetic Filament Eruptions by NVST

Shangwei [Li](#)^{1,2}, Yingna [Su](#)^{1,5}, Tuanhui [Zhou](#)¹, Adriaan van Ballegooijen³, Xudong [Sun](#)⁴, and Haisheng [Ji](#)

2017 [ApJ](#) 844 70

<http://sci-hub.cc/10.3847/1538-4357/aa78f5>

16 Oct 13:25 - Clear harmonic type II burst

Circular-ribbon flares and the related activities

Review

[Qingmin Zhang](#)

[Reviews of Modern Plasma Physics](#) **2024**

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

Spatially resolved radio signatures of electron beams in a coronal shock

[Peijin Zhang](#), [Diana Morosan](#), [Anshu Kumari](#), [Emilia Kilpua](#)

[A&A](#) **2023**

<https://arxiv.org/pdf/2310.08155.pdf>

Statistical analysis of circular-ribbon flares

[Yanjie Zhang](#), [Qingmin Zhang](#), [Dechao Song](#), [Shuting Li](#), [Jun Dai](#), [Zhe Xu](#), [Haisheng Ji](#)
Astrophysical Journal Supplement Series 2022
<https://arxiv.org/pdf/2203.12819.pdf>

Spectroscopic observations of a flare-related coronal jet

[Q. M. Zhang](#), [Z. H. Huang](#), [Y. J. Hou](#), [D. Li](#), [Z. J. Ning](#), [Z. Wu](#)
A&A 2021
<https://arxiv.org/pdf/2101.06629.pdf>

LOFAR observations of a jet-driven piston shock in the low solar corona

[Ciara A. Maguire](#), [Eoin P. Carley](#), [Pietro Zucca](#), [Nicole Vilmer](#), [Peter T. Gallagher](#)
ApJ 2021
<https://arxiv.org/pdf/2101.05569.pdf>

Transverse oscillation of a coronal loop induced by a flare-related jet

[J. Dai](#), [Q. M. Zhang](#), [Y. N. Su](#), [H. S. Ji](#)
A&A 646, A12 (2021)
<https://arxiv.org/pdf/2012.07074.pdf>

Simultaneous transverse oscillations of a coronal loop and a filament excited by a circular-ribbon flare

[O. M. Zhang](#)
A&A 2020
<https://arxiv.org/pdf/2008.01451.pdf>

Preflare-VLP observed in H α emission before the onset of a solar flare

[Dong Li](#), [Song Feng](#), [Wei Su](#), [Yu Huang](#)
A&A Lett 2020

Remote coronal dimmings related to a circular-ribbon flare

Q. M. [Zhang](#), [R. S. Zheng](#)
A&A 2020
<https://arxiv.org/pdf/1912.09618.pdf>

Energy partition in two M-class circular-ribbon flares

Q. M. [Zhang](#), [J. X. Cheng](#), [L. Feng](#), [Y. Su](#), [L. Lu](#), [Y. Huang](#), [D. Li](#), [T. H. Zhou](#), [J. L. Chen](#)
ApJ 2019
<https://arxiv.org/pdf/1908.02685.pdf>

Investigation of white-light emission in circular-ribbon flares

Yongliang [Song](#), [Hui Tian](#)
ApJ 2018
<https://arxiv.org/pdf/1810.02958.pdf>

Chromospheric Condensation and Quasi-periodic Pulsations in a Circular-ribbon Flare

Q. M. [Zhang](#), [D. Li](#), [Z. J. Ning](#)
ApJ 2016
<http://arxiv.org/pdf/1609.03165v1.pdf>

Explosive Chromospheric Evaporation in a Circular-ribbon Flare

Q. M. [Zhang](#), [D. Li](#), [Z. J. Ning](#), [Y. N. Su](#), [H. S. Ji](#), [Y. Guo](#)
ApJ 2016
<http://arxiv.org/pdf/1605.02823v1.pdf>

17 Oct

LOFAR observations of radio burst source sizes and scattering in the solar corona

Pearse C. [Murphy](#), [Eoin P. Carley](#), [Aoife Maria Ryan](#), [Pietro Zucca](#), [Peter T. Gallagher](#)

A&A 2020

<https://arxiv.org/pdf/2011.13735.pdf>

18 Oct

Fractal dimensions of umbral and penumbral regions of sunspots

B. [Rajkumar](#) (1), [S. Haque](#) (1), [W. Hrudehy](#) (2)

Solar Phys. 2017

<https://arxiv.org/ftp/arxiv/papers/1709/1709.08042.pdf>

20 Oct

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>

22 Oct – >02 UT, SW эрупция, C4.4 LDE, a partial halo CME

- Позже небольшие мягкие протоны

- Есть и другая активность

23 Oct

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/1808.04989)

Fractal dimensions of umbral and penumbral regions of sunspots

B. [Rajkumar](#) (1), [S. Haque](#) (1), [W. Hrudehy](#) (2)

Solar Phys. 2017

<https://arxiv.org/ftp/arxiv/papers/1709/1709.08042.pdf>

24 Oct – Пришло УВ, возмущение от эрупции 22-ого, но Vz северная. Кратковременный форбуш.

27 Oct – >15: a significant SW CME; 14:29 – C3.2 LDE

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>

Statistical Study of the Magnetic Field Orientation in Solar Filaments

Yoichiro [Hanaoka](#), [Takashi Sakurai](#)

2017

<https://arxiv.org/pdf/1711.07735.pdf>

28-30 Oct

Solar Energetic Electrons Entering the Earth's Cusp/Lobe

Linghua [Wang](#)¹, Qiugang Zong¹, Quanqi Shi², Robert F. Wimmer-Schweingruber³, and Stuart D. Bale⁴

2021 ApJ 910 12

<https://doi.org/10.3847/1538-4357/abdb2b>
<https://iopscience.iop.org/article/10.3847/1538-4357/abdb2b/pdf>

29 Oct – ~03: протоны с западным профилем, J10~20, due to a significant flare behind the SW лимб;
>02:20- радио II(1)/IV(1), a significant CME
- >15: эрупция центрально-южного волокна

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>

Predicting well-connected SEP events from observations of solar EUVs and energetic protons

Marlon [Núñez](#)^{1*}, Teresa Nieves-Chinchilla² and Antti Pulkkinen²
J. Space Weather Space Clim. **2019**, 9, A27
<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180069.pdf>

GLE and Sub-GLE Redefinition in the Light of High-Altitude Polar Neutron Monitors

S. V. [Poluianov](#), I. G. Usoskin, A. L. Mishev, M. A. Shea, D. F. Smart
[Solar Physics](#) November **2017**, 292:176
<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1202-4.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>

Chirality and Magnetic Configurations of Solar Filaments

Y. [Ouyang](#), Y. H. Zhou, P. F. Chen, C. Fang
ApJ **2016**
<https://arxiv.org/pdf/1612.01054v1.pdf>

Ground level observations of relativistic solar particles on Oct 29th, 2015: Is it a new GLE on the current solar cycle?

C. R. A. [Augusto](#), C. E. Navia, M. N. de Oliveira, A. A. Nepomuceno, A. C. Fauth
2016
<http://arxiv.org/pdf/1603.08863v1.pdf>

30 Oct

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

M. L. [Demidov](#), [Y. Hanaoka](#), [T. Sakurai](#) & [X. F. Wang](#)
[Solar Physics](#) volume 295, Article number: 54 (2020)
<https://link.springer.com/content/pdf/10.1007/s11207-020-01620-4.pdf>

1 Nov - ~22:30: медленно дрейфующий радиоконтинуум

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>

3 Nov

Fractal dimensions of umbral and penumbral regions of sunspots

B. [Rajkumar](#) (1), [S. Hague](#) (1), [W. Hrudehy](#) (2)

Solar Phys. **2017**

<https://arxiv.org/ftp/arxiv/papers/1709/1709.08042.pdf>

3-4 Nov - minor geomagnetic storm $Dst \sim -40$ nT under the influence of effects from CH697

3-5 Nov

Review of Image Processing Methods in Solar Photospheric Data Analyzes

[Mohsen Javaherian](#), [Zahra Eskandari](#)

Iranian Journal of Astronomy and Astrophysics, 10(1), 77-109 (2023)

<https://arxiv.org/pdf/2310.00380.pdf>

Empirical Scaling Relations for the Photospheric Magnetic Elements of the Flaring and Non-Flaring Active Regions

[M.A.Moradhaseli](#), [M.Javaherian](#), [N.Fathalian](#), [H.Safari](#)

Acta Astronomica, vol 71, no 2, p. 163-188, 2021

<https://arxiv.org/pdf/2109.12924.pdf>

- 4 Nov** – 12:03: **очень импульсная** M2.5 западная (N17W67) вспышка, спрей
- 13:52: центральная (N09W04) M3.7/2B **LDE** вспышка/эрупция, **волокно на 304 A**, S5~740, II(2)/IV(1), partial halo CME, **очень слабые протоны**
- 'Solar storm' grounds Swedish air traffic

<http://www.thelocal.se/20151104/solar-storm-grounds-swedish-air-traffic>

See http://www.swpc.noaa.gov/sites/default/files/images/u33/Rutledge_SWW_2016.pdf

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>

Evolution of the Ratio of Mg II Intensities During Solar Flares

[Soumya Roy](#), [Durgesh Tripathi](#)

ApJ **2024**

<https://arxiv.org/pdf/2402.11189.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>

Toroidal Miller-Turner and Soloviev CME models in EUHFORIA: I. Implementation

L. [Linan](#), [A. Maharana](#), [S. Poedts](#), [B. Schmieder](#), [R. Keppens](#)

A&A **2023**

<https://arxiv.org/pdf/2310.17239.pdf>

Type II radio bursts and their association with coronal mass ejections in solar cycles 23 and 24

[Anshu Kumari](#), [Diana E. Morosan](#), [E. K. J. Kilpua](#), [F. Daei](#)

A&A **2023**

<https://arxiv.org/pdf/2305.18992.pdf>

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>

Quasi-periodic pulsations in solar flares: a key diagnostic of energy release on the Sun

[Andrew Inglis](#), [Laura Hayes](#), [Silvina Guidoni](#), [James McLaughlin](#), [Valery M. Nakariakov](#), et al.

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

<https://arxiv.org/abs/2302.11549>

Extreme solar events

Review

[Edward W. Cliver](#), [Carolus J. Schrijver](#), [Kazunari Shibata](#) & [Ilya G. Usoskin](#)

[Living Reviews in Solar Physics](#) volume 19, Article number: 2 (2022)

<https://link.springer.com/content/pdf/10.1007/s41116-022-00033-8.pdf>

ORFEES – a radio spectrograph for the study of solar radio bursts and space weather applications

Abdallah [Hamini](#)^{1,2}, Gabriel Auxepaules², Lionel Birée³, Guy Kenfack², Alain Kerdraon¹, Karl-Ludwig Klein^{1,2*}, Patrice Lespagnol², Sophie Masson^{1,2}, Lucile Coutouly², Christian Fabrice² and Renaud Romagnan¹

J. Space Weather Space Clim. 2021, 11, 57

<https://www.swsc-journal.org/articles/swsc/pdf/2021/01/swsc210035.pdf>

<https://doi.org/10.1051/swsc/2021039>

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>

Trends and Characteristics of High-Frequency Type II Bursts Detected by CALLISTO Spectrometers

[A.C.Umuhire](#) (1), [J.Uwamahoro](#) (2), [K. Sasikumar Raja](#) (3), [A.Kumar](#) (4), [C.Monstein](#) (5)

Advances In Space Research 2021

<https://arxiv.org/pdf/2106.09310.pdf>

Quasi-Periodic Particle Acceleration in a Solar Flare

[Brendan P. Clarke](#), [Laura A. Hayes](#), [Peter T. Gallagher](#), [Shane A. Maloney](#), [Eoin P. Carley](#)

ApJ 2021

<https://arxiv.org/pdf/2102.04267.pdf>

Erupting Magnetic Flux Rope Affects Running Penumbra Waves

[Wensi Wang](#), [Rui Liu](#)

A&A 2021

<https://arxiv.org/pdf/2101.04915.pdf>

Evolution of the Toroidal Flux of CME Flux Ropes during Eruption

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

The Innovation 2020

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

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

[Rui Liu](#)

Research in Astron. Astrophys (RAA) 2020

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

pyCallisto: A Python Library To Process The CALLISTO Spectrometer Data

[Ravindra Pawase](#), [K. Sasikumar Raja](#)

ApJ 2020

<https://arxiv.org/pdf/2006.16300.pdf>

Comprehensive Characterization of Solar Eruptions With Remote and In-Situ Observations, and Modeling: The Major Solar Events on 4 November 2015

Iver H. [Cairns](#), [Kamen A. Kozarev](#), [Nariaki V. Nitta](#), [Neus Agueda](#), [Markus Battarbee](#), [Eoin P. Carley](#), [Nina Dresing](#), [Raul Gomez-Herrero](#), [Karl-Ludwig Klein](#), [David Lario](#), [Jens Pomoell](#), [Carolina Salas-Matamoros](#), [Astrid M. Veronig](#), [Bo Li](#), [Patrick McCauley](#)

Solar Phys. 295, Article number: 32 2020 File

<https://arxiv.org/pdf/1910.03319.pdf>

<https://link.springer.com/content/pdf/10.1007/s11207-020-1591-7.pdf>

Estimation of the physical parameters of a CME at high coronal heights using low frequency radio observations

Surajit [Mondal](#), [Divya Oberoi](#), [Angelos Vourlidas](#)

ApJ 2019

<https://arxiv.org/pdf/1909.12041.pdf>

Observations of a Footpoint Drift of an Erupting Flux Rope

Alena [Zemanova](#), [Jaroslav Dudik](#), [Guillaume Aulanier](#), [Julia K. Thalmann](#), [Peter Gomory](#)

ApJ 2019

<https://arxiv.org/pdf/1908.02082.pdf>

Solar radio bursts as a tool for space weather forecasting

[Klein](#), [Karl-Ludwig](#); [Matamoros](#), [Carolina Salas](#); [Zucca](#), [Pietro](#)

Comptes rendus - Physique, Volume 19, Issue 1-2, p. 36-42, 2018.

<https://reader.elsevier.com/reader/sd/pii/S1631070518300148?token=D537F952710CF6363FBFFAA0FCDAD2C023FF41B2CE662268302A75A4269C47C6EF93BD3474EEE4AA2545C31B0BFDD8D1>

<https://www.sciencedirect.com/science/article/pii/S1631070518300148?via%3Dihub>

GPU-based high-performance imaging for Mingantu spectral radioheliograph.

[Mei](#) Y, [Wang F](#), [Wang W](#), [Chen L](#), [Liu Y](#), [Deng H](#), [Dai W](#), [Liu C](#), [Yan Y](#).

Publications of the Astronomical Society of the Pacific (PASP). 2018. 130(1): 014503.

<https://iopscience.iop.org/article/10.1088/1538-3873/aa9608/pdf>

Solar radio emission as a disturbance of aeronautical radionavigation

C. [Marqué](#), [K.-L. Klein](#), [C. Monstein](#), [H. Opgenoorth](#), [A. Pulkkinen](#), [S. Buchert](#), [S. Krucker](#), [R. Van Hoof](#), [P. Thulesen](#)

Journal of Space Weather and Space Climate (JSWSC), 2018

<https://arxiv.org/pdf/1808.06878.pdf>

Analysis of type II and type III solar radio bursts

[Wijesekera](#), J. V.; [Jayaratne](#), K. P. S. C.; [Adassuriya](#), J.

Journal of Physics: Conference Series, Volume 1005, Issue 1, article id. 012046 (2018).

<sci-hub.se/10.1088/1742-6596/1005/1/012046>

A Solar Eruption with Relatively Strong Geo-effectiveness Originating from Active Region Peripheral Diffusive Polarities

Rui [Wang](#), [Ying D. Liu](#), [Huidong Hu](#), [Xiaowei Zhao](#)

2018 *ApJ* **863** 81

<https://arxiv.org/pdf/1807.03047.pdf>

Solar radio burst associated with the falling bright EUV blob

[Marian Karlický](#), [Alena Zemanova](#), [Jaroslav Dudík](#), [Krzysztof Radiszewski](#)

Astrophysical Journal Letters, Volume 854, Issue 2, article id. L29, 6 pp. (2018)

<https://arxiv.org/pdf/1804.06206.pdf>

Properties of a Small-scale Short-duration Solar Eruption with a Driven Shock

Beili [Ying](#), [Li Feng](#), [Lei Lu](#), [Jie Zhang](#), [Jasmina Magdalenic](#), [Yingna Su](#), [Yang Su](#), [Weiqun Gan](#)

2018

<https://arxiv.org/pdf/1803.00333.pdf>

Solar Radio Burst Associated with the Falling Bright EUV Blob

Marian [Karlický](#)¹, [Alena Zemanová](#)¹, [Jaroslav Dudík](#)¹, and [Krzysztof Radiszewski](#)²

2018 *ApJL* 854 L29

Unambiguous Evidence of Filament Splitting-Induced Partial Eruptions

X. [Cheng](#), [B. Kliem](#), [M. D. Ding](#)

ApJ 2018

<https://arxiv.org/pdf/1802.04932.pdf>

Buildup of a highly twisted magnetic flux rope during a solar eruption

[Wang](#), W., [Liu](#), R., [Wang](#), Y., et al.

2017, *Nature Communications*, 8, 1330

<https://www.nature.com/articles/s41467-017-01207-x.pdf>

Guided flows in coronal magnetic flux tubes

A. [Petralia](#), [F. Reale](#), [P. Testa](#)

A&A 2017

<https://arxiv.org/pdf/1711.04641.pdf>

Flare Ribbons Approach Observed by the Interface Region Imaging Spectrograph and the Solar Dynamics Observatory

Ting [Li](#), [Jun Zhang](#), [Yijun Hou](#)

ApJ 2017

<https://arxiv.org/pdf/1709.03216.pdf>

New Evidence for a Coronal Mass Ejection-driven High Frequency Type II Burst near the Sun

Anshu [Kumari](#)¹, [R. Ramesh](#)¹, [C. Kathiravan](#)¹, and [N. Gopalswamy](#)

2017 *ApJ* 843 10

<http://sci-hub.cc/10.3847/1538-4357/aa72e7>

The impact of the November 4th 2015 event on air traffic radars

Christophe [Marque](#)^{y1}, [Karl Ludwig Klein](#)², [Christian Monstein](#)³, [Hermann](#)

[Opgenoorth](#)⁴, [Stephan Buchert](#)⁴, [Antti Pulkkinen](#)⁵, and [Sören Krucker](#)⁶

CESRA 2016, p.81

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

4-5 Nov

Empirical Scaling Relations for the Photospheric Magnetic Elements of the Flaring and Non-Flaring Active Regions

[M.A.Moradhaseli](#), [M.Javaherian](#), [N.Fathalian](#), [H.Safari](#)

Acta Astronomica, vol 71, no 2, p. 163-188, 2021

<https://arxiv.org/pdf/2109.12924.pdf>

Solar Energetic Electrons Entering the Earth's Cusp/Lobe

Linghua Wang¹, Qiugang Zong¹, Quanqi Shi², Robert F. Wimmer-Schweingruber³, and Stuart D. Bale⁴

2021 ApJ 910 12

<https://doi.org/10.3847/1538-4357/abdb2b>

<https://iopscience.iop.org/article/10.3847/1538-4357/abdb2b/pdf>

5 Nov

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://doi.org/10.3847/1538-4357/ab45f6)

5-7 Nov

Precursory Signs of Large Forbush Decreases

M. Papailiou, M. Abunina, H. Mavromichalaki, A. Belov, A. Abunin, E. Eroshenko & V. Yanke

Solar Physics volume 296, Article number: 100 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01844-y.pdf>

<https://doi.org/10.1007/s11207-021-01844-y>

6 Nov

Toroidal Miller-Turner and Soloviev CME models in EUHFORIA: I. Implementation

L. Linan, A. Maharana, S. Poedts, B. Schmieder, R. Keppens

A&A 2023

<https://arxiv.org/pdf/2310.17239.pdf>

20 Years of ACE Data: How Superposed Epoch Analyses Reveal Generic Features in Interplanetary CME Profiles

Review

F. Regnault, M. Janvier, P. Démoulin, F. Auchère, A. Strugarek, S. Dasso, C. Noûs

JGR 2020

<https://arxiv.org/pdf/2011.05050.pdf>

6-7 Nov – геомагнитная буря ($Dst \sim -88$ nT) и форбуш (~3%) от LDE эрупции 4-ого

Ensemble Modeling of Radiation Belt Electron Flux Decay Following a Geomagnetic Storm: Dependence on Key Input Parameters

Man Hua, Jacob Bortnik, Adam C. Kellerman, Enrico Camporeale, Qianli Ma

Space Weather 2022

<https://doi.org/10.1029/2022SW003051>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2022SW003051>

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>

7-15 Nov

Modelling the magnetic structure of a large-scale horse-shoe-like filament in a decaying and diffuse active region

Kaifeng [Kang](#), [Yang Guo](#), [Ilia I. Roussev](#), [Rony Keppens](#), [Jun Lin](#)
MNRAS Volume 518, Issue 1, January 2023, Pages 388–404, 2022
<https://arxiv.org/pdf/2211.04842.pdf>
<https://doi.org/10.1093/mnras/stac3156>

9 Nov – 13:12: M3.9/2B LDE вспышка, S11E41, эрупция, S3-5~680 sfu, II(2)/IV, яркий CME, протоны J10~2 pfu

Trieste CALLISTO station setup and observations of solar radio bursts

[Marassi, Alessandro](#) ; [Monstein, Christian](#)

Advances in Space Research, Volume 69, Issue 6, p. 2589-2600., 2022

<https://doi.org/10.1016/j.asr.2021.12.043>

CESRA #3339 Jun 2022 <https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3339> 2015-11-09

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>

Analysis of type II and type III solar radio bursts

[Wijesekera](#), J. V.; [Jayaratne, K. P. S. C.](#); [Adassuriya, J.](#)

Journal of Physics: Conference Series, Volume 1005, Issue 1, article id. 012046 (2018).

sci-hub.se/10.1088/1742-6596/1005/1/012046

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>

11 Nov

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>

Identification of Coronal Holes on AIA/SDO images using unsupervised Machine Learning

Fadil [Inceoglu](#), [Yuri Y. Shprits](#), [Stephan G. Heinemann](#), [Stefano Bianco](#)

ApJ 2022

<https://arxiv.org/pdf/2203.10491.pdf>

Characterising coronal turbulence using snapshot imaging of radio bursts in 80-200 MHz

[Atul Mohan](#)

A&A 2021

<https://arxiv.org/pdf/2110.10073.pdf>

Spectropolarimetric Imaging of Metric Type III Solar Radio Bursts

M. M. [Rahman](#), [Iver H. Cairns](#) & [Patrick I. McCauley](#)

[Solar Physics](#) volume 295, Article number: 51 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01616-0.pdf>

11-12 nov

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>

11-17 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>

12 Nov

Large-amplitude quasi-periodic pulsations as evidence of impulsive heating in hot transient loop systems detected in the EUV with SDO/AIA

Fabio [Reale](#) , [Paola Testa](#) , [Antonino Petralia](#) , [Dmitrii Y. Kolotkov](#)

ApJ 2019

<https://arxiv.org/pdf/1909.02847.pdf>

13-18 Nov

A New Space Weather Tool for Identifying Eruptive Active Regions

P. [Pagano](#) , [D. H. Mackay](#) , [S. L. Yardley](#)

ApJ 2019

<https://arxiv.org/pdf/1910.04226.pdf>

14 Nov

Modelling the magnetic structure of a large-scale horse-shoe-like filament in a decaying and diffuse active region

Kaifeng [Kang](#) , [Yang Guo](#) , [Iliia I. Roussev](#) , [Rony Keppens](#) , [Jun Lin](#)

MNRAS Volume 518, Issue 1, January 2023, Pages 388–404, 2022

<https://arxiv.org/pdf/2211.04842.pdf>

<https://doi.org/10.1093/mnras/stac3156>

The impact of the November 4th 2015 event on air traffic radars

Christophe [Marque](#)₁ , Karl Ludwig Klein₂ , Christian Monstein₃ , Hermann

Opgenoorth₄ , Stephan Buchert₄ , Antti Pulkkinen₅ , and Sören Krucker₆

CESRA 2016, p.81

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

14-17 Nov

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>

15-16 Nov, >22 –крупная эрупция большого, circular SW волокна (Extensive filament eruptions), This event triggered other eruptions in nearby filaments, the total area affected by the events was large. **304 A**, C1 LDE; сложный многокомпонентный CME; на метровых спектрах практически ничего нет.

External reconnection and resultant reconfiguration of overlying magnetic fields during sympathetic eruptions of two filaments

[Y. J. Hou](#) , [T. Li](#) , [Z. P. Song](#) , [J. Zhang](#)

A&A 2020

<https://arxiv.org/pdf/2006.06191.pdf>

Sympathetic eruptions of two filaments with an identifiable causal link observed by the Solar Dynamics Observatory

Zhiping [Song](#), [Yijun Hou](#), [Jun Zhang](#), [Peng Wang](#)

ApJ 2020

<https://arxiv.org/pdf/2002.07979.pdf>

17-22 Nov

On the Hemispheric Bias Seen in Vector Magnetic Field Data

[Yang Liu](#), [Ana Belén Griñón-Marín](#), [Jon T. Hoeksema](#), [Aimee A. Norton](#) & [Xudong Sun](#)

[Solar Physics](#) volume 297, Article number: 17 (2022)

<https://link.springer.com/content/pdf/10.1007/s11207-022-01949-y.pdf>

22 Nov, >07 – A CME was observed off the east limb following a **SE filament eruption, 304 A**

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>

FINE STRUCTURE EVENTS IN MICROWAVE EMISSION DURING SOLAR MINIMUM

Chengming [Tan](#), Baolin Tan, Yihua Yan, Wei Wang, Linjie Chen, Fei Liu, Yujiang Dou

[Solar-Terrestrial Physics](#). 2019. Vol. 5. Iss. 2. P. 3–8.

[Solnechno-zemnaya fizika](#), 2019. Vol. 5. Iss. 2. P. 4–10

<https://naukaru.ru/en/storage/view/36892>

23 Nov

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>

28 Nov

Unsigned magnetic flux as a proxy for radial-velocity variations in Sun-like stars

[R.D. Haywood](#), [T.W. Millbourne](#), [S.H. Saar](#), [A. Mortier](#), [D. Phillips](#), [D. Charbonneau](#), [A. Collier](#)

[Cameron](#), [H.M. Cegla](#), [N. Meunier](#), [M.L. Palumbo III](#)

ApJ 2020

<https://arxiv.org/pdf/2005.13386.pdf>

2-8 Dec - A large recurrent northern hemisphere coronal hole (CH704) with a very long trans equatorial extension was in an Earth facing position.

3 Dec

Detection of weak ubiquitous impulsive nonthermal emissions from the solar corona

[Rohit Sharma](#), [Divya Oberoi](#), [Marina Battaglia](#), [Sam Krucker](#)

ApJ 2022

<https://arxiv.org/pdf/2208.07147.pdf>

Propagation Effects in Quiet Sun Observations at Meter Wavelengths

[Rohit Sharma](#), [Divya Oberoi](#)

ApJ 2020
<https://arxiv.org/pdf/2009.10604.pdf>

4 Dec

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>

On the relation between transition region network jets and coronal plumes

Youqian [Qi](#), [Zhenghua Huang](#), [Lidong Xia](#), [Bo Li](#), [Hui Fu](#), [Weixin Liu](#), [Mingzhe Sun](#), [Zhenyong Hou](#)
Solar Phys. **2019**
<https://arxiv.org/pdf/1906.10353.pdf>

Critical magnetic field strengths for solar coronal plumes in quiet regions and coronal holes?

[Ellis A. Avallone](#), [Sanjiv K. Tiwari](#), [Navdeep K. Tiwari](#), [Ronald L. Moore](#), [Amy Winebarger](#)
ApJ 2018
<https://arxiv.org/pdf/1805.11188.pdf>

6-9 Dec

Formation of Large Scale Coronal Loops Interconnecting Two Active Regions Through Gradual Magnetic Reconnection and Associated Heating Process

[Guohui Du](#), [Yao Chen](#), [Chunming Zhu](#), [Chang Liu](#), [Lili Ge](#), [Bing Wang](#), [Chuanyang Li](#), [Haimin Wang](#)
2018
<https://arxiv.org/pdf/1805.04831.pdf>

08-09 Dec

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>

9 Dec

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>

First direct observation of a torsional Alfvén oscillation at coronal heights

P. [Kohutova](#), [E. Verwichte](#), [C. Froment](#)
A&A 2019
<https://arxiv.org/pdf/1912.03954.pdf>

Formation of coronal rain triggered by impulsive heating associated with magnetic reconnection

P. [Kohutova](#), [E. Verwichte](#), [C. Froment](#)
A&A 2019
<https://arxiv.org/pdf/1910.07746.pdf>

Automated Spatiotemporal Analysis of Fibrils and Coronal Rain Using the Rolling Hough Transform
Thomas [Schad](#)

[Solar Physics](#) September **2017**, 292:132
<http://iopscience.iop.org/article/10.1088/0004-637X/739/2/67/pdf>
<https://arxiv.org/pdf/1809.03635.pdf>

Neutral Helium Triplet Spectroscopy of Quiescent Coronal Rain with Sensitivity Estimates for Spectropolarimetric Magnetic Field Diagnostics

Thomas A. [Schad](#)

ApJ **2018**

<https://arxiv.org/pdf/1809.02252.pdf>

Evidence for precursors of the coronal hole jets in solar bright points

Salome R. [Bagashvili](#), [Bidzina M. Shergelashvili](#), [Darejan R. Japaridze](#), [Vasil Kukhianidze](#), [Stefaan Poedts](#), [Teimuraz V. Zaqarashvili](#), [Maxim L. Khodachenko](#), [Patrick De Causmaecker](#)

ApJL **2018**

<https://arxiv.org/pdf/1803.00551.pdf>

10 Dec

Improved detection of farside solar active regions using deep learning

T. [Felipe](#), [A. Asensio Ramos](#)

A&A **2019**

<https://arxiv.org/pdf/1911.01099.pdf>

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

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

ApJ **2016**

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

11 Dec

An extreme ultraviolet wave associated with the possible expansion of sheared arcades

Yihan [Liu](#), [Ruisheng Zheng](#), [Liang Zhang](#), [Hengyuan Wei](#), [Ze Zhong](#), [Shuhong Yang](#), [Yao Chen](#)

A&A **2023**

<https://arxiv.org/pdf/2304.14862.pdf>

11-12 Dec

Formation of Large Scale Coronal Loops Interconnecting Two Active Regions Through Gradual Magnetic Reconnection and Associated Heating Process

[Guohui Du](#), [Yao Chen](#), [Chunming Zhu](#), [Chang Liu](#), [Lili Ge](#), [Bing Wang](#), [Chuanyang Li](#), [Haimin Wang](#)

2018

<https://arxiv.org/pdf/1805.04831.pdf>

13 Dec , 10:34 – SE C5.3 LDE (S14E36) вспышка и заметная эрупция

14-16 Dec

Measurements and Simulations of the Geomagnetically Induced Currents in Low-latitude Power Networks During Geomagnetic Storms

J. J. [Zhang](#) , Y. Q. Yu , C. Wang, D. Du , D. Wei , L. G. Liu

Space Weather **Volume18, Issue8** e2020SW002549 **2020**

<https://doi.org/10.1029/2020SW002549>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002549>

15-22 Dec

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>

16 Dec - Two likely Earth directed CMEs were observed during the day. The first was observed after the C6 LDE in AR 12468 while the second was caused by an **extensive filament eruption** from near the equator stretching to the southern polar crown filament.

ALMA small-scale features in the quiet Sun and active regions

[R. Brajsa](#), [I. Skokic](#), [D. Sudar](#), [A. O. Benz](#), [S. Krucker](#), [H.-G. Ludwig](#), [S. H. Saar](#), [C. L. Selhorst](#)

A&A 2021

<https://arxiv.org/pdf/2105.03644.pdf>

First solar observations with ALMA

Maria [Loukitcheva](#)

Advances in Space Research 2018

<https://arxiv.org/pdf/1809.00430.pdf>

Multi-Spacecraft Observations of the Rotation and Non-Radial Motion of a CME Flux Rope causing an intense geomagnetic storm

Yi A. [Liu](#), [Ying D. Liu](#), [Huidong Hu](#), [Rui Wang](#), [Xiaowei Zhao](#)

ApJ 2018

Solar ALMA observations: constraining the chromosphere above sunspots

Maria [Loukitcheva](#), [Kazumasa Iwai](#), [Sami K. Solanki](#), [Stephen M. White](#), [Masumi Shimojo](#)

ApJ 2017

<https://arxiv.org/pdf/1710.03812.pdf>

ALMA Discovery of Solar Umbral Brightness Enhancement at $\lambda=3$ mm

Kazumasa [Iwai](#), Maria Loukitcheva, Masumi Shimojo, Sami K. Solanki, Stephen M. White

ApJL 2017

<https://arxiv.org/pdf/1705.03147.pdf>

16-20 Dec

Centre to limb brightness variations from ALMA full disk solar images

Davor [Sudar](#), [Roman Brajša](#), [Ivica Skokić](#), [Arnold O. Benz](#)

Solar Phys. 2019

<https://arxiv.org/pdf/1909.08952.pdf>

Solar polar brightening and radius at 100 and 230 GHz observed by ALMA

Caius L. [Selhorst](#), [Paulo J. A. Simões](#), [Roman Brajša](#), [Adriana Valio](#), [C. G. Giménez de Castro](#), [Joaquim E. R.](#)

[Costa](#), [Fabian Menezes](#), [Jean Pierre Rozelot](#), [Antonio S. Hales](#), [Kazumasa Iwai](#), [Stephen White](#)

ApJ 2018

<https://arxiv.org/pdf/1811.12158.pdf>

Magnetic Clouds: Solar Cycle Dependence, Sources, and Geomagnetic Impacts

Y. [Li](#), [J. G. Luhmann](#), [B. J. Lynch](#)

Solar Phys. 2018

<https://arxiv.org/ftp/arxiv/papers/1808/1808.04078.pdf>

Center-to-limb observations of the Sun with ALMA

C. E. [Alissandrakis](#), S. Patsourakos, A. Nindos, T. S. Bastian

A&A 2017

<https://arxiv.org/pdf/1705.09008.pdf>

17 Dec

The physics of solar spectral imaging observations in dm-cm wavelengths and the application on space weather

Review

[Baolin Tan](#), [Yihua Yan](#), [Jing Huang](#), [Yin Zhang](#), [Chengming Tan](#), [Xiaoshuai Zhu](#)

Advance in Space Research, 2023

<https://arxiv.org/ftp/arxiv/papers/2311/2311.14360.pdf>

A Genetic Algorithm to model Solar Radio Active Regions from 3D Magnetic Field Extrapolations

Alexandre José de Oliveira e [Silva](#), [Caius L. Selhorst](#), [Joaquim E. R. Costa](#), [Paulo J. A. Simões](#), [C. Guillermo Giménez de Castro](#), [Sven Wedemeyer](#), [Stephen M. White](#), [Roman Brajša](#), [Adriana Valio](#)

Frontiers in Astronomy and Space Sciences 2022

<https://arxiv.org/pdf/2205.03385.pdf>

Subterahertz Radius and Limb Brightening of the Sun Derived from SST and ALMA

[Fabian Menezes](#), [Caius L. Selhorst](#), [Carlos Guillermo Giménez de Castro](#), [Adriana Valio](#)

MNRAS 2021

<https://arxiv.org/pdf/2111.15261.pdf>

A study of sunspot 3 minute oscillations using ALMA and GST

[Yi Chai](#), [Dale E. Gary](#), [Kevin P. Reardon](#), [Vasyl Yurchyshyn](#)

ApJ 2021

<https://arxiv.org/pdf/2111.05812.pdf>

First Spectral Analysis of a Solar Plasma Eruption Using ALMA

Andrew S. [Rodger](#)¹, Nicolas Labrosse¹, Sven Wedemeyer^{2,3}, Mikolaj Szydlarski^{2,3}, Paulo J. A. Simões^{1,4,5}, and Lyndsay Fletcher¹

2019 ApJ 875 163

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

Magnetic Field Dynamics and Varying Plasma Emission in Large-scale Coronal Loops

S. [Şahin](#)¹, V. Yurchyshyn², P. Kumar³, A. Kilcik¹, K. Ahn², and X. Yang²

2019 ApJ 873 75

<https://doi.org/10.3847/1538-4357/ab04aa>

First Spectral Analysis of a Solar Plasma Eruption Using ALMA

Andrew S. [Rodger](#), [Nicolas Labrosse](#), [Sven Wedemeyer](#), [Mikolaj Szydlarski](#), [Paulo J.A. Simões](#), [Lyndsay Fletcher](#)

ApJ 2019

<https://arxiv.org/pdf/1902.01319.pdf>

First solar observations with ALMA

Maria [Loukitcheva](#)

Advances in Space Research 2018

<https://arxiv.org/pdf/1809.00430.pdf>

Observing the Sun with the Atacama Large Millimeter-submillimeter Array (ALMA): Fast-Scan Single-Dish Mapping

S.M. [White](#), K. Iwai, N.M. Phillips, R.E. Hills, A. Hirota,
Solar Phys. 2017

<https://arxiv.org/pdf/1705.04766.pdf>

First ALMA Observation of a Plasmoid Ejection from an X-ray Bright Point

M. [Shimojo](#), H. S. Hudson, S. M. White, T. S. Bastian, K. Iwai
ApJL **2017**
<https://arxiv.org/pdf/1704.04881.pdf>

Observing the Sun with Atacama Large Millimeter/submillimeter Array (ALMA): High Resolution Interferometric Imaging

M. [Shimojo](#), T.S. Bastian, A.S. Hales, S.M. White, K. Iwai, R.E. Hills, A. Hirota, N.M. Phillips, T. Sawada, P. Yagoubov, G. Siringo, S. Asayama, M. Sugimoto, R. Brajsa, I. Skokic, M. Barta, S. Kim, I. de Gregorio, S.A. Corder, H.S. Hudson, S. Wedemeyer, D.E. Gary, B. De Pontieu, M. Loukicheva, G.D. Fleishman, B. Chen, A. Kobelski, Y. Yan
Solar Phys. **2017**
<https://arxiv.org/pdf/1704.03236.pdf>

18 Dec

Science development study for the Atacama Large Aperture Submillimeter Telescope (AtLAST) - Solar and stellar observations

[Sven Wedemeyer](#), [Miroslav Barta](#), [Roman Brajsa](#), [Yi Chai](#), [Joaquim Costa](#), [Dale Gary](#), +++
<https://arxiv.org/pdf/2403.00920.pdf>
Open Research Europe as part of a collection on the Atacama Large Aperture Submillimeter Telescope (AtLAST) **2024**
<https://arxiv.org/pdf/2403.00920.pdf>

Solar Observing with the Atacama Large Millimeter-Submillimeter Array Review

[Timothy Bastian](#), [Masumi Shimojo](#), [Miroslav Barta](#), [Stephen White](#), [Kazumasa Iwai](#)
Frontiers in Astronomy and Space Science **2022**
<https://arxiv.org/pdf/2209.01659.pdf>

The quiet Sun at mm Wavelengths as Seen by ALMA

[Costas Alissandrakis](#), [Timothy Bastian](#), [Roman Brajša](#)
Frontiers in Astronomy and Space Science **2022**
<https://arxiv.org/pdf/2209.02569.pdf>

ALMA small-scale features in the quiet Sun and active regions

[R. Brajsa](#), [I. Skokic](#), [D. Sudar](#), [A. O. Benz](#), [S. Krucker](#), [H.-G. Ludwig](#), [S. H. Saar](#), [C. L. Selhorst](#)
A&A **2021**
<https://arxiv.org/pdf/2105.03644.pdf>

The solar chromosphere at millimetre and ultraviolet wavelengths. I. Radiation temperatures and a detailed comparison

Shahin [Jafarzadeh](#), [Sven Wedemeyer](#), [Mikolaj Szydlarski](#), [Bart De Pontieu](#), [Reza Rezaei](#), [Mats Carlsson](#)
A&A **2019**
<https://arxiv.org/pdf/1901.05763.pdf>

Observations of the solar chromosphere with ALMA and comparison with theoretical models

R. [Brajša](#), [D. Sudar](#), [I. Skokic](#), [A. O. Benz](#), [M. Kuhar](#), [A. Kobelski](#), [S. Wedemeyer](#), [S. M. White](#), [H.-G. Ludwig](#), [M. Temmer](#), [S. H. Saar](#), [C. L. Selhorst](#)
The 20th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun, July 29 - Aug 3 2018, Boston / Cambridge, USA **2018**
<https://arxiv.org/pdf/1812.07293.pdf>

First analysis of solar structures in 1.21 mm full-disc ALMA image of the Sun

R. [Brajša](#), [D. Sudar](#), [A. O. Benz](#), [I. Skokić](#), [M. Bárta](#), [B. De Pontieu](#), [S. Kim](#), [A. Kobelski](#), [M. Kuhar](#), [M. Shimojo](#), [S. Wedemeyer](#), [S. White](#), [P. Yagoubov](#), [Y. Yan](#)
A&A 613, A17 **2017**
<https://arxiv.org/pdf/1711.06130.pdf>

A First Comparison of Millimeter Continuum and Mg II Ultraviolet Line Emission from the Solar Chromosphere

T. S. **Bastian**, G. Chintzoglou, B. De Pontieu, [M. Shimojo](#), [D. Schmit](#), [J. Leenaarts](#), [M. Loukitcheva](#)
2017

<https://arxiv.org/pdf/1706.04532.pdf>

Observing the Sun with Atacama Large Millimeter/submillimeter Array (ALMA): High Resolution Interferometric Imaging

M. **Shimojo**, T.S. Bastian, A.S. Hales, S.M. White, K. Iwai, R.E. Hills, A. Hirota, N.M. Phillips, T. Sawada, P. Yagoubov, G. Siringo, S. Asayama, M. Sugimoto, R. Brajsa, I. Skokic, M. Barta, S. Kim, I. de Gregorio, S.A. Corder, H.S. Hudson, S. Wedemeyer, D.E. Gary, B. De Pontieu, M. Loukicheva, G.D. Fleishman, B. Chen, A. Kobelski, Y. Yan

Solar Phys. **2017**

<https://arxiv.org/pdf/1704.03236.pdf>

19 Dec

Spectral Features of the Solar Transition Region and Chromospheric Lines at Flare Ribbons Observed with IRIS

L. F. **Wang**^{1,2}, Y. Li^{3,4}, Q. Li^{3,4}, X. Cheng^{1,2}, and M. D. Ding^{1,2}

2023 ApJS 268 62

<https://iopscience.iop.org/article/10.3847/1538-4365/acf127/pdf>

<https://arxiv.org/pdf/2308.11275.pdf>

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

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

2019 ApJ 885 34

[sci-hub.se/10.3847/1538-4357/ab45f6](https://arxiv.org/abs/1905.04566)

Different Signatures of Chromospheric Evaporation in Two Solar Flares Observed with IRIS

Y. **Li**^{1,2}, M. D. Ding³, J. Hong³, H. Li¹, and W. Q. Gan¹

2019 ApJ 879 30

<https://iopscience.iop.org/article/10.3847/1538-4357/ab245a/pdf>

Propagating wave in active region-loops, located over the solar disk observed by the Interface Region Imaging Spectrograph

B. **Zhang**, [Y. J. Hou](#), [J. Zhang](#)

A&A 611, A47 **2018**

<https://arxiv.org/pdf/1801.02880.pdf>

19-20 Dec

Measurements and Simulations of the Geomagnetically Induced Currents in Low-latitude Power Networks During Geomagnetic Storms

[J. J. Zhang](#), [Y. Q. Yu](#), [C. Wang](#), [D. Du](#), [D. Wei](#), [L. G. Liu](#)

Space Weather **Volume18, Issue8** e2020SW002549 **2020**

<https://doi.org/10.1029/2020SW002549>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002549>

20 Dec – a major geostorm ($Dst \sim -170$) and Forbush under the influence of CMEs of 16 Dec

Magnetic Clouds: Solar Cycle Dependence, Sources, and Geomagnetic Impacts

Y. **Li**, J. G. Luhmann, B. J. Lynch

[Solar Physics](#) October **2018**, 293:135

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1356-8.pdf>

Observing the Sun with Atacama Large Millimeter/submillimeter Array (ALMA): High Resolution Interferometric Imaging

M. [Shimojo](#), T.S. Bastian, A.S. Hales, S.M. White, K. Iwai, R.E. Hills, A. Hirota, N.M. Phillips, T. Sawada, P. Yagoubov, G. Siringo, S. Asayama, M. Sugimoto, R. Brajsa, I. Skokic, M. Barta, S. Kim, I. de Gregorio, S.A. Corder, H.S. Hudson, S. Wedemeyer, D.E. Gary, B. De Pontieu, M. Loukicheva, G.D. Fleishman, B. Chen, A. Kobelski, Y. Yan

Solar Phys. 2017

<https://arxiv.org/pdf/1704.03236.pdf>

Interplanetary and ionosphere scintillation produced by ICME 20 December 2015

I. V. [Chashei](#), S. A. Tyul'bashev, V. I. Shishov, I. A. Subaev

Space Weather Volume 14, Issue 9 September 2016 Pages 682–688

22 Dec

Total reflection of a flare-driven quasi-periodic EUV wave train at a coronal hole boundary

Xinping [Zhou](#), [Yuandeng Shen](#), [Zehao Tang](#), [Chengrui Zhou](#), [Yadan Duan](#), [Song Tang](#)

A&A 2022

<https://arxiv.org/pdf/2112.15098.pdf>

22 Dec-2 Jan 2016

Effects of optimisation parameters on data-driven magnetofrictional modelling of active regions

[A. Kumari](#), [D. J. Price](#), [F. Daei](#), [J. Pomoell](#), [E. K. J. Kilpua](#)

A&A 2023

<https://arxiv.org/pdf/2305.16080.pdf>

23 Dec – 00:40: AR 2473 erupted, producing an M4-class flare, S22E63. II/2, IV/2

Compound eruptions of twin flux ropes in a solar active region

[Ruisheng Zheng](#), [Liang Zhang](#), [Bing Wang](#), [Xiangliang Kong](#), [Hongqiang Song](#), [Zhao Wu](#), [Shiwei Feng](#), [Huadong Chen](#), [Yao Chen](#)

ApJL 2021

<https://arxiv.org/pdf/2111.00713.pdf>

23 Dec 2015–1 Jan 2016

Magnetic Helicity Signs and Flaring Propensity: Comparing Force-free Parameter with the Helicity signs of H α Filaments and X-ray Sigmoids

[V. Aparna](#), [Manolis K. Georgoulis](#), [Petrus C. Martens](#)

ApJ 2024

<https://arxiv.org/ftp/arxiv/papers/2403/2403.17075.pdf>

24 Dec – Подряд налагающиеся 02:12 M1.1 импульс (с длительной подложкой) и 06:16(?) C5.9/C6.5 LDE из SE/NE(?) области

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>

24-28 Dec

Thermodynamic evolution of a sigmoidal active region with associated flares

[Sargam M. Mulay](#), [Durgesh Tripathi](#), [Helen Mason](#)

MNRAS Volume 504, Issue 1, Pages 1201–1218 2021

<https://arxiv.org/ftp/arxiv/papers/2103/2103.09561.pdf>
<https://watermark.silverchair.com/stab816.pdf>
<https://doi.org/10.1093/mnras/stab816>

27-29 Dec

The effect of data-driving and relaxation model on magnetic flux rope evolution and stability

[Andreas Wagner](#), [Daniel J. Price](#), [Slava Bourgeois](#), [Farhad Daei](#), [Jens Pomoell](#), [Stefaan Poedts](#), [Anshu Kumari](#), [Teresa Barata](#), [Robertus Erdélyi](#), [Emilia K. J. Kilpua](#)

A&A **2024**

<https://arxiv.org/pdf/2410.18672>

28 Dec – 12:45, M1.8 LDE, S19W23, **крупная центральная эрупция из большой АО, несколько выбросов на 304 А**, максимум радио на дм, S3~370, ragged asymmetric full halo CME, небольшие мягкие протоны

The Automatic Identification and Tracking of Coronal Flux Ropes -- Part II: New Mathematical Morphology-based Flux Rope Extraction Method and Deflection Analysis

[Andreas Wagner](#), [Slava Bourgeois](#), [Emilia K. J. Kilpua](#), [Ranadeep Sarkar](#), [Daniel J. Price](#), [Anshu Kumari](#), [Jens Pomoell](#), [Stefaan Poedts](#), [Teresa Barata](#), [Robertus Erdélyi](#), [Orlando Oliveira](#), [Ricardo Gafeira](#)

A&A **2023**

<https://arxiv.org/pdf/2312.00673.pdf>

The Automatic Identification and Tracking of Coronal Flux Ropes -- Part I: Footpoints and Fluxes

[Andreas Wagner](#), [Emilia K. J. Kilpua](#), [Ranadeep Sarkar](#), [Daniel J. Price](#), [Anshu Kumari](#), [Farhad Daei](#), [Jens Pomoell](#), [Stefaan Poedts](#)

A&A **2023**

<https://arxiv.org/pdf/2306.15019.pdf>

A Statistical Study of the IRIS Observational Signatures of Nanoflares and Non-thermal Particles

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

ApJ **2022**

<https://arxiv.org/pdf/2211.06832.pdf>

Direct Evidence for Magnetic Reflection of Heavy Ions from High Mach Number Collisionless Shocks

Hadi **Madanian**¹, Steven J. Schwartz², Stephen A. Fuselier^{1,3}, David Burgess⁴, Drew L. Turner⁵, Li-Jen Chen⁶, Mihir I. Desai^{1,3}, and Michael J. Starkey¹

2021 ApJL 915 L19

<https://iopscience.iop.org/article/10.3847/2041-8213/ac0aee/pdf>

<https://doi.org/10.3847/2041-8213/ac0aee>

Exploring the coronal evolution of AR 12473 using time-dependent, data-driven magnetofrictional modelling★

D. J. **Price**, J. Pomoell and E. K. J. Kilpua

A&A 644, A28 (2020)

<https://doi.org/10.1051/0004-6361/202038925>

<https://www.aanda.org/articles/aa/pdf/2020/12/aa38925-20.pdf>

A New Tool for CME Arrival Time Prediction Using Machine Learning Algorithms: CAT-PUMA

Jiajia **Liu**, [Yudong Ye](#), [Chenlong Shen](#), [Yuming Wang](#), [Robert Erdélyi](#)

ApJ **2018**

<https://arxiv.org/pdf/1802.02803.pdf>

29 Dec

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>

30 Dec

The winding number of coronal flux ropes

I. Data-driven time-dependent magnetofrictional modelling

D. J. [Price](#), J. Pomoell and E. K. J. Kilpua

A&A, 686, A197 (2024)

<https://www.aanda.org/articles/aa/pdf/2024/06/aa48409-23.pdf>

Review of Image Processing Methods in Solar Photospheric Data Analyzes

[Mohsen Javaherian](#), [Zahra Eskandari](#)

Iranian Journal of Astronomy and Astrophysics, 10(1), 77-109 (2023)

<https://arxiv.org/pdf/2310.00380.pdf>

A Two-Sided-Loop X-Ray Solar Coronal Jet Driven by a Minifilament Eruption

Alphonse C. [Sterling](#), [Louise K. Harra](#), [Ronald L. Moore](#), [David A. Falconer](#)

ApJ 2018

<https://arxiv.org/pdf/1811.05557.pdf>

30-31 Dec

Measurements and Simulations of the Geomagnetically Induced Currents in Low-latitude Power Networks During Geomagnetic Storms

[J. J. Zhang](#), [Y. Q. Yu](#), [C. Wang](#), [D. Du](#), [D. Wei](#), [L. G. Liu](#)

Space Weather [Volume18, Issue8](#) e2020SW002549 2020

<https://doi.org/10.1029/2020SW002549>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002549>

31 Dec -1 Jan – **Буря от эрупции 28-ого, Dst~-117** (позже и меньше, чем ожидалось)

См. Geostorm_Dec15-Jan 16.jpg

The Identification of a Planar Magnetic Structure within the ICME Shock Sheath and Its influence on Galactic Cosmic-Ray Flux

Zubair I. [Shaikh](#)¹, Anil N. Raghav², Geeta Vichare¹, Ankush Bhaskar³, and Wageesh Mishra⁴

2018 ApJ 866 118

<http://iopscience.iop.org/article/10.3847/1538-4357/aae1b1/pdf>