

2013

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

[ftp://ftp.sec.noaa.gov/pub/warehouse/2013/2013\\_plots/xray/](ftp://ftp.sec.noaa.gov/pub/warehouse/2013/2013_plots/xray/)  
[ftp://ftp.sec.noaa.gov/pub/warehouse/2013/2013\\_plots/proton/](ftp://ftp.sec.noaa.gov/pub/warehouse/2013/2013_plots/proton/)

**1 Jan**

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

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

Solar Phys. 2019

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

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

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

2016

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

**2 Jan**

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

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

A&A 2018

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

**3 Jan**

**Magnetic Reconnection: From "Open" Extreme-ultraviolet Loops to Closed Post-flare Ones Observed by SDO**

Jun [Zhang](#)<sup>1</sup>, Shuhong Yang<sup>1</sup>, Ting Li<sup>1</sup>, Yuzong Zhang<sup>1</sup>, Leping Li<sup>1</sup>, and Chaowei Jiang

2013 ApJ 776 57

**4 Jan**

**Automated Detection of Solar Radio Bursts using a Statistical Method**

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

Solar Phys. 2019

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

**4-12 Jan**

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

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

A&A 2015

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

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

**5 Jan**

### **Motion magnification in coronal seismology**

Sergey **Anfinogentov**, Valery M. Nakariakov

Solar Phys. **2016**

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

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

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

ApJ **2015**

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

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

V. G. **Eselevich**, M. V. Eselevich

Cosmic Research, January **2015**, Volume 53, Issue 1, pp 21-30

Kosmicheskie Issledovaniya, **2015**, Vol. 53, No. 1, pp. 24–34.

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

D.V. **Romanov**, K.V. Romanov, V.A. Romanov, N.V. Kucherov, V.G. Eselevich, , M.V. Eselevich

Advances in Space Research, Volume 55, Issue 3, 1 February **2015**, Pages 949–957

<http://www.sciencedirect.com/science/article/pii/S027311771400581X>

### **Instantaneous Flare Properties**

Hugh **Hudson**

RHESSI Nuggets, No. 2018, **2014**

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Instantaneous\\_Flare\\_Properties](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Instantaneous_Flare_Properties)

### **Физические отличия в начальной фазе формирования двух типов корональных выбросов массы**

М.В. **Еселевич**

ИКИ-2014, Сессия: Солнце

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

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

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

**2014** ApJ 784 48

### **6 Jan Эрупция большого волокна**

### **Modelling the magnetic vectors of ICMEs at different heliocentric distances with INFROS**

Ranadeep **Sarkar**, [Nandita Srivastava](#), [Nat Gopalswamy](#), [Emilia Kilpua](#)

ApLS **2024**

<https://arxiv.org/pdf/2406.09247>

### **Modelling a multi-spacecraft coronal mass ejection encounter with EUHFORIA**

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

A&A **2021**

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

### **7 Jan**

### **Excitation of kink oscillations of coronal loops: statistical study**

**Zimovets**, I.V., Nakariakov, V.M.

A&A, 2015  
E-print, Dec 2014

**8 Jan**

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

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

JGR [Volume124, Issue2](#), February 2019, Pages 812-836

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

<https://arxiv.org/pdf/1901.09921.pdf>

### **Early-stage Solar Energetic Particle Acceleration by Coronal Mass Ejection-driven Shocks with Realistic Seed Spectra. I. Low Corona**

Kamen A. [Kozarev](#)<sup>1</sup>, Maher A. Dayeh<sup>2,3</sup>, and Ashraf Farahat<sup>4</sup>

2019 ApJ 871 65

[sci-hub.tw/10.3847/1538-4357/aaf1ce](https://sci-hub.tw/10.3847/1538-4357/aaf1ce)

**8-10 Jan**

### **Modelling a multi-spacecraft coronal mass ejection encounter with EUHFORIA**

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

A&A 2021

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

### **Heliospheric Evolution of Magnetic Clouds**

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

ApJ 2019

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

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

**9 Jan**

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

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

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

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

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

[http://www.izmiran.ru/stp/lars/MoreSp/130113/big\\_bw.gif](http://www.izmiran.ru/stp/lars/MoreSp/130113/big_bw.gif)

### **Circular-ribbon flares and the related activities**

**Review**

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

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

### **Statistical analysis of circular-ribbon flares**

[Yanjie Zhang](#), [Qingmin Zhang](#), [Dechao Song](#), [Shuting Li](#), [Jun Dai](#), [Zhe Xu](#), [Haisheng Ji](#)

Astrophysical Journal Supplement Series 2022

<https://arxiv.org/pdf/2203.12819.pdf>

**13-15 Jan**

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

Xiaoyu Wang<sup>1</sup>, Xing Cao<sup>1</sup>, Xudong Gu<sup>1</sup>, Binbin Ni<sup>1,2</sup>, Xin Ma<sup>1</sup>, Taorong Luo<sup>1</sup>, and Deyu Guo<sup>1</sup>  
2023 ApJ 942 30

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

**14 Jan**

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

Ronald L. Moore, Sanjiv K. Tiwari, Navdeep K. Panesar, V. Aparna, Alphonse C. Sterling

ApJ 2024

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

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

Koval, A., Y. Chen, A. Stanislavsky, and Q.-H. Zhang

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

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

**15 Jan**

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

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

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

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

## **A SOLAR CORONAL JET EVENT TRIGGERS A CORONAL MASS EJECTION**

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

2015 ApJ 813 115

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

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

**16-18 Jan**

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

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

Nature Communications, 6, 5947 2015

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

**17-19 Jan**

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

N. Alzate and H. Morgan

2016 ApJ 823 129

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

Nathalia Alzate & Huw Morgan

UKSP Nugget #52, Oct 2014

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

**18 Jan**

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

K. Sasikumar [Raja](#)<sup>1</sup>, R. Ramesh<sup>1</sup>, K. Hariharan<sup>1</sup>, C. Kathiravan<sup>1</sup>, and T. J. Wang

2014 ApJ 796 56

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

**19 Jan**

**Hot coronal loops associated with umbral brightenings\***

C. E. Alissandrakis and S. Patsourakos

A&A 556, A79 (2013)

**20 Jan**

**Dynamics and connectivity of an extended arch filament system**

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

A&A 2019

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

**21 Jan**

**Motion magnification in coronal seismology**

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

Solar Phys. 2016

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

**21 Jan**

**Novel data analysis techniques in coronal seismology**

**Review**

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

2022

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

**21-22 Jan**

**3D Reconstruction of Coronal Loops by the Principal Component Analysis**

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

E-print, Oct 2013; *Entropy*

**22 Jan**

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

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

2019

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

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

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

ApJ 2016

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

**22-23 Jan**

**Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and Online Catalog**

Patrick I. [McCauley](#), Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves

Solar Phys. 2015

<http://arxiv.org/pdf/1505.02090v1.pdf>

**23 Jan**

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

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

Solar Phys. 2015

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

**25 Jan**

**Segmentation of Coronal Holes Using Active Contours Without Edges**

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

Solar Phys. 2016

**27 Jan**

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

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

ApJ 2016

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

**Evidence for Hot Fast Flow above a Solar Flare Arcade**

S. **Imada**<sup>1,2</sup>, K. Aoki<sup>2,3</sup>, H. Hara<sup>2,3</sup>, T. Watanabe<sup>2</sup>, L. K. Harra<sup>4</sup>, and T. Shimizu

2013 ApJ 776 L11

**27 Jan-02 Feb**

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

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

2023

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

**29 Jan-3 Feb**

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

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

2021

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

**31 Jan**

**Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions**

Ronald L. **Moore**<sup>1,2</sup>, Navdeep K. Panesar<sup>3,4</sup>, Alphonse C. Sterling<sup>2</sup>, and Sanjiv K. Tiwari<sup>3,4</sup>

2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

**Filament Shape Versus Coronal Potential Magnetic Field Structure**

Boris **Filippov**

MNRAS 2015

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

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

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

Solar Physics, 2014

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

**Feb 2013**

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

P. **Romano**<sup>1</sup>, F. P. Zuccarello<sup>2,3,4</sup>, S. L. Guglielmino<sup>5</sup>, and F. Zuccarello

2014 ApJ 794 118

**1-2 Feb**

**Statistical Study of Solar Dimmings Using CoDiT**

Larisha D. **Krista**<sup>1,2</sup> and Alysha A. Reinard<sup>1,3</sup>

2017 ApJ 839 50

<http://iopscience.iop.org/sci-hub.cc/0004-637X/839/1/50/>

**New Vacuum Solar Telescope observations of a flux rope tracked by a filament activation**

Shuhong **Yang**, Jun Zhang, Zhong Liu, Yongyuan Xiang

2014

<http://arxiv.org/pdf/1403.0714v1.pdf>

**2 Mar**

**Circular-ribbon flares and the related activities**

**Review**

**Qingmin Zhang**

Reviews of Modern Plasma Physics 2024

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

**4 Feb**

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

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

Solar Phys. 2015

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

**5 Feb**

**Sun-as-a-star observations of obscuration dimmings caused by filament eruptions**

Yu **Xu**, **Hui Tian**, **Astrid M. Veronig**, **Karin Dissauer**

ApJ 2024

<https://arxiv.org/pdf/2405.13671>

**Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions**

Ronald L. **Moore**<sup>1,2</sup>, Navdeep K. Panesar<sup>3,4</sup>, Alphonse C. Sterling<sup>2</sup>, and Sanjiv K. Tiwari<sup>3,4</sup>

2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

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

See: [https://igam02ws.uni-graz.at/mediawiki/index.php?title=Main\\_Page:Event\\_Studies](https://igam02ws.uni-graz.at/mediawiki/index.php?title=Main_Page:Event_Studies)

Feb 6, 2013 (C8.7)

**Magnetosheath jet occurrence rate in relation to CMEs and SIRs**

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

JGR [Volume127, Issue4](#) e2021JA030124 2022  
<https://www.essoar.org/doi/abs/10.1002/essoar.10508761.2>  
<https://doi.org/10.1029/2021JA030124>  
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2021JA030124>

### **Properties of Streamer Wave Events Observed During the STEREO Era**

Bieke [Decraemer](#), [Andrei N. Zhukov](#), [Tom Van Doorselaere](#)  
ApJ 2020  
<https://arxiv.org/pdf/2003.12350.pdf>

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

Ian G. [Richardson](#), Tycho T. von Roseninge, Hilary V. Cane  
Solar Phys. Volume 290, [Issue 6](#), pp 1741-1759 2015 File  
<http://arxiv.org/pdf/1505.03071v1.pdf>  
<https://sci-hub.ru/10.1007/s11207-015-0701-4>

### **Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and [Online Catalog](#)**

Patrick I. [McCauley](#), Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves  
Solar Phys. 2015  
<http://arxiv.org/pdf/1505.02090v1.pdf>

### **Negative bursts**

Grechnev et al., PASJ, 2013

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

### **11 Feb**

#### **Finding the critical decay index in solar prominence eruptions**

N. [Vasantharaju](#), [P. Vemareddy](#), [B. Ravindra](#), [V. H. Doddamani](#)  
ApJ 2019  
<https://arxiv.org/pdf/1909.10442.pdf>

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

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

### **Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions**

Ronald L. [Moore](#)<sup>1,2</sup>, Navdeep K. Panesar<sup>3,4</sup>, Alphonse C. Sterling<sup>2</sup>, and Sanjiv K. Tiwari<sup>3,4</sup>  
2022 ApJ 933 12  
<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

### **14 Feb**

#### **Solar Filaments Detection using Active Contours Without Edges**

Sanmoy [Bandyopadhyay](#), [Vaibhav Pant](#)  
URSI\_RCRS 2024  
<https://arxiv.org/pdf/2412.20749>

### **14-15 Feb**



## **Inflows in the Inner White-light Corona: The Closing-down of Flux after Coronal Mass Ejections**

P. [Hess](#) and Y.-M. Wang

2017 ApJ 850 6

<http://sci-hub.cc/10.3847/1538-4357/aa921d>

**15 Feb**

## **Magnetosheath jet occurrence rate in relation to CMEs and SIRs**

Florian [Koller](#), Manuela Temmer, Luis Preisser, Ferdinand Plaschke, Paul Geyer, Lan K Jian, Owen Wyn Roberts, Heli Hietala, Adrian T. LaMoury

JGR [Volume127, Issue4](#) e2021JA030124 2022

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

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

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

**16 Feb**

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

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

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

Douglas F. da [Silva](#), [Paulo J. A. Simões](#), [R. F. Hidalgo Ramírez](#), [Adriana Válio](#)

Solar Phys. 2020

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

## **Frequency rising sub-THz emission from solar flare ribbons**

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

A&A 2018

<https://arxiv.org/pdf/1810.03922.pdf>

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

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

2017 ApJ 849 40

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

## **Millimeter Observation of Solar Flares with Polarization**

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

Ground-based Solar Observations in the Space Instrumentation Era

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

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

## **Spectral Trends of Solar Bursts at Sub-THz Frequencies**

L. O. T. [Fernandes](#), P. Kaufmann, E. Correia, C. G. Giménez de Castro, A. S. Kudaka, A. Marun, P. Pereyra, J.-P. Raulin, A. B. M. Valio

[Solar Physics](#) January 2017, 292:21

<http://sci-hub.cc/10.1007/s11207-016-1043-6>

## **Energy Release and Initiation of Sunquake in C-class Flare**

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

2014

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

**18 Feb**

**Solar Filaments Detection using Active Contours Without Edges**

Sanmoy **Bandyopadhyay**, [Vaibhav Pant](#)

URSI\_RCRS 2024

<https://arxiv.org/pdf/2412.20749>

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

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

2023

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

**Can We Determine the Filament Chirality by the Filament Footpoint Location or the Barb-bearing?**

Q. **Hao**, Y. Guo, C. Fang, [P. F. Chen](#), [W. Cao](#)

RAA 2015

<http://arxiv.org/pdf/1506.08490v1.pdf>

**18-19 Feb**

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

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

Solar Phys. 2017

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

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

Несколько эрупций. В том числе большого южного волокна, см. [304 A](#)

**20 Feb**

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

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

2021

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

**23-28 Feb**

**Homologous Cyclones in the Quiet Sun**

Xinting **Yu**<sup>1,2</sup>, Jun Zhang<sup>1</sup>, Ting Li<sup>1</sup>, Yuzong Zhang<sup>1</sup>, and Shuhong Yang

2014 ApJ 782 L15

**25 Feb** – очень длительная B8.9 LDE, эрупция и большой CME из-за восточного лимба

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

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

Solar Phys. 2020

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

**25 Feb – 21 Feb**

**Segmentation of Coronal Holes Using Active Contours Without Edges**

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

Solar Phys. 2016

**25-28 Feb**

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

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

Solar Phys. 2017

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

**26-27 Feb**

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

T. **Rees-Crockford**<sup>1</sup>, D. S. Bloomfield<sup>1</sup>, E. Scullion<sup>1</sup>, and S.-H. Park<sup>2</sup>

2020 ApJ 897 35

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

**27 Feb**

**Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions**

Ronald L. **Moore**<sup>1,2</sup>, Navdeep K. Panesar<sup>3,4</sup>, Alphonse C. Sterling<sup>2</sup>, and Sanjiv K. Tiwari<sup>3,4</sup>

2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

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

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

ApJ 2022

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

**Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions**

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

ApJ 2022

<https://arxiv.org/ftp/arxiv/papers/2203/2203.13287.pdf>

**Three case studies of height-time profiles of prominence eruptions observed by AIA and LASCO**

Ts **Tsvetkov N.Petrov**

[Journal of Atmospheric and Solar-Terrestrial Physics](#)

Volume 177, October 2018, Pages 29-37

<http://sci-hub.tw/10.1016/j.jastp.2018.05.013>

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

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

Solar Physics, 2014

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

**28 Feb**

**Solar and Heliospheric Physics with the Square Kilometre Array with Review**

Valery M. **Nakariakov**, Mario M. Bisi, Philippa K. Browning, Dalmiro Maia, Eduard P. Kontar, Divya Oberoi, Peter T. Gallagher, Iver H. Cairns, Heather Ratcliffe

Proc. Of Science 2015

E-print, Dec 2014

## **LOFAR tied-array imaging of Type III solar radio bursts**

D. E. **Morosan**, P. T. Gallagher, P. Zucca, R. Fallows, E. P. Carley, G. Mann, et al.  
**2014**

<http://arxiv.org/pdf/1407.4385v1.pdf>

### **1 Mar**

## **Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions**

Ronald L. **Moore**<sup>1,2</sup>, Navdeep K. Panesar<sup>3,4</sup>, Alphonse C. Sterling<sup>2</sup>, and Sanjiv K. Tiwari<sup>3,4</sup>  
**2022** ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

### **2 March**

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

Jiayan **Yang**<sup>1,2</sup>, Junchao Hong<sup>1,2</sup>, Haidong Li<sup>1,2</sup>, and Yunchun Jiang<sup>1,2</sup>

**2020** ApJ 900 158

<https://doi.org/10.3847/1538-4357/aba7c0>

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

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

A&A **2016**

### **3 March**

## **A New Space Weather Tool for Identifying Eruptive Active Regions**

P. **Pagano**, **D. H. Mackay**, **S. L. Yardley**

ApJ **2019**

<https://arxiv.org/pdf/1910.04226.pdf>

### **4 March**

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

**Miteva**, R. 1 , Samwel, S. W. 2 , Costa-Duarte, M. V. 3 , Malandraki, O. E. 4

Sun and Geosphere, **2017**; 12/1: 11 -19

[http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG\\_v12\\_No1\\_2017-pp-11-19.pdf](http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG_v12_No1_2017-pp-11-19.pdf)

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

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

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

Yang **Wang**<sup>1,2</sup> and Gang Qin<sup>1,2</sup>

**2023** ApJ 954 81

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

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

Jinhye **Park**<sup>1</sup>, Hyun-Jin Jeong<sup>1</sup>, and Yong-Jae Moon<sup>1,2</sup>

**2023** ApJ 953 159

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

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

**Review**

Richard A. **Harrison**, Jackie A. Davies, Doug Biesecker, Mark Gibbs  
Space Weather Volume 15, Issue 8 August **2017** Pages 985–1003

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

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

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

JGR 2017 DOI: 10.1002/2017JA024218

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

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

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

Solar Phys. 2016 File

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

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

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

### **5-18 March**

#### **Modeling solar energetic particle events using ENLIL heliosphere simulations**

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

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

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

### **6 March**

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

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

ApJ 2015

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

### **11 March**

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

K. Sasikumar **Raja**<sup>1</sup>, R. Ramesh<sup>1</sup>, K. Hariharan<sup>1</sup>, C. Kathiravan<sup>1</sup>, and T. J. Wang

2014 ApJ 796 56

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

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

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

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

### **12-22 Mar 2013**

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

Y. **Kawabata**, **S. Inoue**, **T. Shimizu**

ApJ 2020

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

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

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

Xinping **Zhou**, Hongfei Liang

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

### **14 March**

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

Hengyuan **Wei**, Zhenghua Huang, Zhenyong Hou, Youqian Qi, Hui Fu, Bo Li, Lidong Xia

MNRAS:Letter 2020

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

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

Bo **Yang**, Jiayan Yang, Yi Bi, Zhe Xu, Junchao Hong, Haidong Li, Hechao Chen

ApJ 2019

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

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

[https://igam02ws.uni-graz.at/mediawiki/index.php?title=Main\\_Page:Event\\_Studies](https://igam02ws.uni-graz.at/mediawiki/index.php?title=Main_Page:Event_Studies)

[http://figshare.com/articles/The\\_March\\_15\\_Solar\\_Eruption\\_and\\_St\\_Patrick\\_s\\_Day\\_March\\_17\\_Geomagnetic\\_Storm/656804](http://figshare.com/articles/The_March_15_Solar_Eruption_and_St_Patrick_s_Day_March_17_Geomagnetic_Storm/656804)

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

Sanchita **Pal**, Dibyendu Nandy, Emilia K J Kilpua

A&A 2022

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

### **Magnetic reconnection between loops accelerated by nearby filament eruption**

Leping **Li**, Hardi Peter, Lakshmi Pradeep Chitta, Hongqiang Song, Kaifan Ji, Yongyuan Xiang

ApJ 2020

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

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

Carlos Roberto **Braga**, Angelos Vourlidas, Guillermo Stenborg, Alisson Dal Lago, Rafael Rodrigues Souza de Mendonça, Ezequiel Echer

JGR 2020

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

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

Y. **Kawabata**<sup>1</sup>, S. Inoue<sup>2,4</sup>, and T. Shimizu<sup>3,4</sup>

2020 ApJ 895 105

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

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

Nishtha **Sachdeva**

Ph.D. **Thesis** 2019

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

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

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

2017

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

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

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

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

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

**Simultaneous longitudinal and transverse oscillation in an active filament**

V. **Pant**, R. Mazumder, D. Yuan, D. Banerjee, A. K. Srivastava, Y. Shen

[Solar Phys.](#) 2016

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

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

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

[New Astron.](#) Volume 30, July 2014, Pages 68–78

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

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

Chin-Chun **Wu**, Kan Liou, Angelos Vourlidas, Simon Plunkett, Murray Dryer, S. T. Wu, Richard A. Mewaldt

[JGR](#) Volume 121, Issue 1 January 2016 Pages 56–76

**Study of Solar Energetic Particle Associations with Coronal Extreme-ultraviolet Waves**

Jinhye **Park**<sup>1</sup>, D. E. Innes<sup>2</sup>, R. Bucik<sup>2,3</sup>, Y.-J. Moon<sup>1,4</sup>, and S. W. Kahler

2015 [ApJ](#) 808 3

See presentation

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

**The Relation between Solar Eruption Topologies and Observed Flare Features I: Flare Ribbons**

A. **Savcheva**, E. Pariat, S. McKillop, [P. McCauley](#), [E. Hanson](#), [Y. Su](#), [E. Werner](#), [E. E. DeLuca](#)

2015

<http://arxiv.org/pdf/1506.03452v1.pdf>

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

V. **Pant**, A.K. Srivastava, D. Banerjee, M. Goossens, P.F. Chen, N.C. Joshi, Y.H. Zhou

[RAA](#), 2015

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

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

K. Sasikumar **Raja**<sup>1</sup>, R. Ramesh<sup>1</sup>, K. Hariharan<sup>1</sup>, C. Kathiravan<sup>1</sup>, and T. J. Wang

2014 [ApJ](#) 796 56

**15-17 March**

**Advancing interplanetary magnetohydrodynamic models through solar energetic particle modelling**

**Insights from the 2013 March 15 SEP event\***

A. Niemela<sup>1,2</sup>, N. Wijsen<sup>3,4</sup>, A. Aran<sup>5,6</sup>, L. Rodriguez<sup>2</sup>, J. Magdalenic<sup>1,2</sup> and S. Poedts<sup>1,7</sup>

A&A 679, A93 (2023)

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

**Challenges in Specifying and Predicting Space Weather**

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

Space Weather e2019SW002404 2020

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

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

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

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

Space Weather special issue: Space Weather Capabilities Assessment 2018

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

**Interplanetary Magnetic Flux Ropes as Agents Connecting Solar Eruptions and Geomagnetic Activities**

K. [Marubashi](#), K.-S. Cho, H. Ishibashi

[Solar Physics](#) December 2017, 292:189

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1204-2.pdf>

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

David [Webb](#), Nariaki Nitta

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

**[Webb](#)\_ISEST (International Study for Earth-Affecting Solar Transients) \_MM WG4 Campaign Events\_2014, File**

See [http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_ICME%5CCME\\_Lists](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_ICME%5CCME_Lists)

**15-19 Mar**

**Solar Active Regions Emergence Prediction Using Long Short-Term Memory Networks**

[Spiridon Kasapis](#), [Irina N. Kitiashvili](#), [Alexander G. Kosovichev](#), [John T. Stefan](#)

ApJ 2024

<https://arxiv.org/pdf/2409.17421>

**16 March**

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

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

ApJ 2021

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

**Initiation and Early Kinematic Evolution of Solar Eruptions**

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

ApJ 2020



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

### **Finding the critical decay index in solar prominence eruptions**

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

ApJ **2019**

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

### **16-19 Mar**

#### **Thermosphere modeling capabilities assessment: geomagnetic storms**

Sean [Bruinsma](#)<sup>1\*</sup>, Claude Boniface<sup>1</sup>, Eric K. Sutton<sup>2</sup> and Mariangel Fedrizzi<sup>3</sup>

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

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

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

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

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

### **Forbush Decreases during the DeepMin and MiniMax of Solar Cycle 24**

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

XXV ECRS **2016** Proceedings

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

### **Space Weather Effects in the Earth's Radiation Belts**

**Review**

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

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

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

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

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

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

### **17-18 March**

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

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

**2017**

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

### **18 Mar**

#### **Solar Filaments Detection using Active Contours Without Edges**

Sanmoy [Bandyopadhyay](#), [Vaibhav Pant](#)

URSI\_RCRS **2024**

<https://arxiv.org/pdf/2412.20749>

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

### 21 March

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

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

ApJ 2015

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

### 23 March

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

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

2018

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

### 23-25-28 Mar

#### EUHFORIA modelling of the Sun-Earth chain of the magnetic cloud of 28 June 2013

G. [Prete](#)<sup>1,\*</sup>, A. Niemela<sup>3,4,\*</sup>, B. Schmieder<sup>3,5</sup>, N. Al-Haddad<sup>6</sup>, B. Zhuang<sup>6</sup>, F. Lepreti<sup>1,2</sup>, V. Carbone<sup>1,2</sup> and S. Poedts<sup>3,7</sup>

A&A 683, A28 (2024)

<https://www.aanda.org/articles/aa/pdf/2024/03/aa46906-23.pdf>

### 28 March

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

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

Solar Phys. 2016

File

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

### 30 March

#### Imaging and Spectroscopic Observations of a Transient Coronal Loop: Evidence for the Non-Maxwellian $\kappa$ -Distributions

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

ApJ 2015

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

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

### 1-4 Apr

#### The evolution of arch filament systems and moving magnetic features around a sunspot\*

Li [Ma](#)<sup>1,2</sup>, Wangping Zhou<sup>1,2</sup>, Guiping Zhou<sup>2</sup> and Jun Zhang

A&A 583, A110 (2015)

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

### 5 Apr

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

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

Space weather 2024

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**О пространственных наблюдениях радиоисточников тонкой структуры солнечных радиовсплесков**  
**Чернов** Г.П., Фомичев В.В., Сыч Р.А., Yan Yihua, Fu Qijun, Жданов Д.А.  
ИКИ-2014, Сессия: Солнце  
<http://plasma2014.cosmos.ru/presentations>

**Forecasting propagation and evolution of CMEs in an operational setting: What has been learned**  
Yihua **Zheng**, Peter Macneice, Dusan Odstrcil, M. L. Mays, Lutz Rastaetter, Antti Pulkkinen, Aleksandre Taktakishvili, Michael Hesse, M. Masha Kuznetsova, Hyesook Lee and Anna Chulaki  
Space Weather, Volume 11, Issue 10, pages 557–574, October 2013  
<http://www.readcube.com/articles/10.1002/swe.20096?>

**11-13 Apr**

**Forecasting the Structure and Orientation of Earthbound Coronal Mass Ejections**  
E. K. J. **Kilpua**, [N. Lugaz](#), [L. Mays](#), [M. Temmer](#)  
Space Weather 17 2019  
<https://doi.org/10.1029/2018SW001944>  
[sci-hub.se/10.1029/2018SW001944](http://sci-hub.se/10.1029/2018SW001944)  
Space Weather Quarterly 16, issue 1, 6 -30 2019  
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/swq.21>

**Coronal Magnetic Structure of Earthbound CMEs and In situ Comparison**  
Erika **Palmerio**, [Emilia K. J. Kilpua](#), [Christian Möstl](#), [Volker Bothmer](#), [Alexander W. James](#), [Lucie M. Green](#), [Alexey Isavnin](#), [Jackie A. Davies](#), [Richard A. Harrison](#)  
Space Weather 2018  
<https://arxiv.org/pdf/1803.04769.pdf> **File**

**Ensemble modeling of CMEs using the WSA-ENLIL+Cone model**  
M. L. **Mays**, A. Taktakishvili, A. A. Pulkkinen, D. Odstrcil, P. J. MacNeice, L. Rastaetter, J. A. LaSota, Y. Zheng, M. M. Kuznetsova  
2015 Solar Phys.  
<http://arxiv.org/pdf/1504.04402v1.pdf>

**11-21 Apr**

**Solar Filaments and Interplanetary Magnetic Field Bz**  
V. **Aparna** and Petrus C. Martens  
2020 ApJ 897 68  
<https://doi.org/10.3847/1538-4357/ab908b>  
<http://sci-hub.tw/10.3847/1538-4357/ab908b>

## **Forbush decreases at a middle latitude neutron monitor: relations to geomagnetic activity and to interplanetary plasma structures**

I. **Parnahaj**, K. Kudela

[Astrophysics and Space Science](#) September **2015**, 359:35 [File](#)

**12 April**, 20:38 – M3.3 NW вспышка. Несколько небольших эрупций

## **Spectral Trends of Solar Bursts at Sub-THz Frequencies**

L. O. T. **Fernandes**, P. Kaufmann, E. Correia, C. G. Giménez de Castro, A. S. Kudaka, A. Marun, P. Pereyra, J.-P. Raulin, A. B. M. Valio

[Solar Physics](#) January **2017**, 292:21

<http://sci-hub.cc/10.1007/s11207-016-1043-6>

**12-15 Apr**

## **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>

## **A New Look at Type III Bursts and their Use as Coronal Diagnostics**

Samuel **Tun** Beltran, Sean Cutchin, Stephen White

**2015**

<http://arxiv.org/ftp/arxiv/papers/1508/1508.00206.pdf>

**13 Apr**

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

## **Investigation on the Spatiotemporal Structures of Supra-Arcade Spikes**

[Rui Liu](#), [Yuming Wang](#)

A&A **2021**

<https://arxiv.org/pdf/2106.04752.pdf>

## **An Observationally Constrained Analytical Model for Predicting the Magnetic Field Vectors of ICMEs at 1 AU**

Ranadeep **Sarkar**, [Nat Gopalswamy](#), [Nandita Srivastava](#)

ApJ **2019**

<https://arxiv.org/pdf/1912.03494.pdf>

## **Galactic Cosmic-Ray Anisotropy During the Forbush Decrease Starting 2013 April 13**

U. **Tortermun**<sup>1</sup>, D. Ruffolo<sup>1</sup>, and J. W. Bieber

**2018** ApJL 852 L26

<http://iopscience.iop.org/sci-hub.tw/2041-8205/852/2/L26/>

## **Forbush Decreases during the DeepMin and MiniMax of Solar Cycle 24**

D. **Lingri**, H. Mavromichalaki, A. Belov, E. Eroshenko, V. Yanke, A. Abunin, M. Abunina

XXV European Cosmic Ray Symposium, Turin, Sept. 4-9 2016

**2016**

<https://arxiv.org/pdf/1612.08900v1.pdf>

## **Average spatial distribution of cosmic rays behind the interplanetary shock -Global Muon Detector Network observations-**

M. **Kozai**, K. Munakata, C. Kato, T. Kuwabara, M. Rockenbach, A. Dal Lago, N. J. Schuch, C. R. Braga, R. R. S. Mendonça, H. K. Al Jassar, M. M. Sharma, M. L. Duldig, J. E. Humble, P. Evenson, I. Sabbah, M. Tokumaru

ApJ 2016  
<http://arxiv.org/pdf/1605.06591v1.pdf>

**14-15 Apr**

**On the quasi-three dimensional configuration of magnetic clouds**

Qiang [Hu](#), [Wen He](#), [Jiong Qiu](#), [A. Vourlidas](#), [Chunming Zhu](#)

GRL 2020

<https://arxiv.org/pdf/2010.11889.pdf>

**Suzaku detection of enigmatic geocoronal solar wind charge exchange event associated with coronal mass ejection**

[Daiki Ishi](#), [Kumi Ishikawa](#), [Masaki Numazawa](#), [Yoshizumi Miyoshi](#), [Naoki Terada](#), [Kazuhiisa Mitsuda](#), [Takaya Ohashi](#), [Yuichiro Ezoe](#)

PASJ 2019

<https://arxiv.org/pdf/1902.07652.pdf>

**Comparison of magnetic properties in a magnetic cloud and its solar source on April 11-14 2013**

P. [Vemareddy](#), C.Möstl, T. Rollett, [W. Mishra](#), [C. Farrugia](#), [M. Leitner](#)

ApJ 2016

<http://arxiv.org/pdf/1607.03811v1.pdf>

**18 Apr** - 18:41, C6.5, пересвет, STREO-A  $A=11*2/313 = 0.07$

**18 Apr** - 07:16 M6.5 N07E13 861 Halo CME

**On the Characteristics of Footpoints of Solar Magnetic Flux Ropes during the Eruption**

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

ApJ Supplement Series 2016

<http://arxiv.org/pdf/1605.04047v1.pdf>

**18-21 Apr**

**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>

**19 Apr**

**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>

**Local Helioseismology of Emerging Active Regions: A Case Study**

Alexander G. [Kosovichev](#), Junwei Zhao, Stathis Ikonidis

Lecture Notes in Physics 2016

<http://arxiv.org/pdf/1607.04987v1.pdf>

**April 20-21** - Several **back-sided large CMEs** were observed.

**20-22 Apr**

**Long-period oscillations of active region patterns: least-squares mapping on second-order curves**

G. **Dumbadze**, B.M. Shergelashvili, V. Kukhianidze, G. Ramishvili, T.V. Zaqarashvili, M. Khodachenko, E. Gurgenchashvili, S. Poedts, P. De Causmaecker

A&A **2016**

<https://arxiv.org/pdf/1610.01509v1.pdf>

**20-27 Apr**

**Solar Active Regions Emergence Prediction Using Long Short-Term Memory Networks**

[Spiridon Kasapis](#), [Irina N. Kitiashvili](#), [Alexander G. Kosovichev](#), [John T. Stefan](#)

ApJ **2024**

<https://arxiv.org/pdf/2409.17421>

**21 April**, ~07 – небольшая центрально-западная эрупция, **304 A**; небольшие мягкие протоны  
24d – буря, Dst~-52 nT

**Simultaneous observations of a breakout current sheet and a flare current sheet in a coronal jet event**

[Liheng Yang](#), [Xiaoli Yan](#), [Zhike Xue](#), [Zhe Xu](#), [Qingmin Zhang](#), [Yijun Hou](#), [Jincheng Wang](#), [Huadong Chen](#)

MNRAS **2024**

<https://arxiv.org/pdf/2401.02123.pdf>

**Observational Study of Recurrent Jets Confined by Active Region Loops**

Liheng **Yang**<sup>1,2,3</sup>, Xiaoli Yan<sup>1,3</sup>, Zhike Xue<sup>1,3</sup>, Huadong Chen<sup>2</sup>, Jincheng Wang<sup>1,3</sup>, Zhe Xu<sup>1,3</sup>, and Qiaoling Li<sup>4</sup>

**2023** ApJ 945 96

<https://iopscience.iop.org/article/10.3847/1538-4357/acb6f6/pdf>

**Degree of electric current neutralization and the activity in solar Active Regions**

P. **Vemareddy**

MNRAS **2019**

<https://arxiv.org/pdf/1904.02648.pdf>

**22Apr**

**Statistical study of type III bursts and associated HXR emissions**

[James, Tomin](#) ; [Vilmer, Nicole](#)

Astronomy & Astrophysics, Volume 673, id.A57, 13 pp. **2023**

<https://www.aanda.org/articles/aa/pdf/2023/05/aa45825-22.pdf>

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

Federica **Chiappetta**<sup>1</sup>, Monica Laurenza<sup>2</sup>, Fabio Lepreti<sup>1,3</sup>, and Giuseppe Consolini<sup>2</sup>

**2021** ApJ 915 8

<https://doi.org/10.3847/1538-4357/abfe09>

<https://iopscience.iop.org/article/10.3847/1538-4357/abfe09/pdf>

**23 Apr**

**Multiple electron acceleration instances during a series of solar microflares observed simultaneously at X-rays and microwaves**

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

ApJ 2021  
<https://arxiv.org/pdf/2109.12847.pdf>

### **CME-Driven and Flare-Ignited Fast Magnetosonic Waves Successively Detected in a Solar Eruption**

Xinping [Zhou](#), [Yuandeng Shen](#), [Jiangtao Su](#), [Zehao Tang](#), [Chengrui Zhou](#), [Yadan Duan](#), [Song Tan](#)  
Sola Phys. 2021  
<https://arxiv.org/pdf/2109.02847.pdf>

### **Solar Flare Arcade Modelling: Bridging the gap from 1D to 3D Simulations of Optically Thin Radiation**

[Graham S. Kerr](#), [Joel C. Allred](#), [Vanessa Polito](#)  
ApJ 2020  
<https://arxiv.org/pdf/2007.13856.pdf>

### **A 3D Model of AR 11726 Heated by Nanoflares**

Joel [Allred](#), [Adrian Daw](#), [Jeffrey Brosius](#)  
2018  
<https://arxiv.org/pdf/1807.00763.pdf>

### **Height Variation of the Vector Magnetic Field in Solar Spicules**

D. Orozco [Suárez](#)<sup>1,2</sup>, A. Asensio Ramos<sup>1,2</sup>, and J. Trujillo Bueno  
2015 ApJ 803 L18  
<http://arxiv.org/pdf/1504.04637v1.pdf>

### **EUNIS Sees Pervasive Faint Fe XIX Emission: Evidence for Nanoflare Heating**

Jeff [Brosius](#)  
RHESSI Science Nugget, No. 233, Aug 2014  
[http://sprg.ssl.berkeley.edu/~tohan/wiki/index.php/RHESSI\\_Science\\_Nuggets](http://sprg.ssl.berkeley.edu/~tohan/wiki/index.php/RHESSI_Science_Nuggets)

**24 Apr** 24d – буря, Dst~-52 nT

### **Cold Solar Flares. I. Microwave Domain**

Alexandra L. [Lysenko](#)<sup>1</sup>, Stephen M. White<sup>2</sup>, Dmitry A. Zhdanov<sup>3</sup>, Nataliia S. Meshalkina<sup>3</sup>, Aleksander T. Altyntsev<sup>3</sup>, Galina G. Motorina<sup>1,4,5</sup>, and Gregory D. Fleishman<sup>6,7</sup>  
2023 ApJ 954 122  
<https://iopscience.iop.org/article/10.3847/1538-4357/acea20/pdf>

### **The First AGILE Solar Flare Catalog**

[Alessandro Ursi](#), [Nicolò Parmiggiani](#), [Mauro Messerotti](#), [Alberto Pellizzoni](#), [Carlotta Pittori](#), [Francesco Longo](#), [Francesco Verrecchia](#), [Andrea Argan](#), [Andrea Bulgarelli](#), [Marco Tavani](#), [Patrizio Tempesta](#), [Fabio D'Amico](#)  
ApJ 2023  
<https://arxiv.org/pdf/2305.14957.pdf>

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

Sophie [Musset](#), [Mariana Jeunon](#), [Lindsay Glesener](#)  
2020 ApJ 889 183  
<https://arxiv.org/pdf/1903.10414.pdf>  
[sci-hub.si/10.3847/1538-4357/ab6222](https://arxiv.org/pdf/1903.10414.pdf)

**24-25 April** – слабые жесткие протоны

**28 Apr**

### **Cause and Kinematics of a Jet-Like CME**

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

ApJ 2020

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

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

Sargam M. [Mulay](#), Durgesh Tripathi, Giulio Del Zanna, Helen Mason

A&A 2016

**30 Apr**

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

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

The Astrophysical Journal, 885, 34 (2019)

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

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

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

2019 ApJ 885 34

[sci-hub.se/10.3847/1538-4357/ab45f6](https://sci-hub.se/10.3847/1538-4357/ab45f6)

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

S. J. [Edwards](#), A. R. Yeates, F.-X. Bocquet, D.H. Mackay

Solar Phys. 2015

<http://arxiv.org/pdf/1511.00427v1.pdf>

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

### **Automated Detection of Accelerating Solar Eruptions using Parabolic Hough Transform**

[Ritesh Patel](#), [Vaibhav Pant](#), [Priyanka Iyer](#), [Dipankar Banerjee](#), [Marilena Mierla](#), [Matthew J. West](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2010.14786.pdf>

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

Erica [Lastufka](#)<sup>1,2</sup>, Säm Krucker<sup>1,3</sup>, Ivan Zimovets<sup>4</sup>, Bulat Nizamov<sup>5</sup>, Stephen White<sup>6</sup>, Satoshi Masuda<sup>7</sup>, Dmitriy Golovin<sup>4</sup>, Maxim Litvak<sup>4</sup>, Igor Mitrofanov<sup>4</sup>, and Anton Sanin<sup>4</sup>

2019 ApJ 886 9

[sci-hub.se/10.3847/1538-4357/ab4a0a](https://sci-hub.se/10.3847/1538-4357/ab4a0a)

**1-15 May**

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

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

Solar Phys. 2017

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

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

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

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

Adv Sp Res. 1-14 (2022)

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



## **Bipolar Ephemeral Active Regions, Magnetic Flux Cancellation, and Solar Magnetic Explosions**

Ronald L. **Moore**<sup>1,2</sup>, Navdeep K. Panesar<sup>3,4</sup>, Alphonse C. Sterling<sup>2</sup>, and Sanjiv K. Tiwari<sup>3,4</sup>  
2022 ApJ 933 12

<https://iopscience.iop.org/article/10.3847/1538-4357/ac6181/pdf>

<https://arxiv.org/ftp/arxiv/papers/2203/2203.13287.pdf>

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

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

Research in Astronomy and Astrophysics 2021

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

## **Transient Mass Loss Analysis of Solar Observations using Stellar Methods**

M. K. **Crosley**, R. A. Osten, C. Norman

2017

<https://arxiv.org/pdf/1707.01928.pdf>

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

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

## **When do solar erupting hot magnetic flux ropes form?**

[A. Nindos](#), [S. Patsourakos](#), [A. Vourlidas](#), [X. Cheng](#), [J. Zhang](#)

A&A 2020

<https://arxiv.org/pdf/2008.04380.pdf>

## **Quiet Sun H $\alpha$ Transients and Corresponding Small-Scale Transition Region and Coronal Heating**

V. M. J. **Henriques**, D. Kuridze, M. Mathioudakis, F. P. Keenan

ApJ 2016

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

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

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

ApJ 2015

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

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

Timothy A. **Howard**

J. Space Weather Space Clim., 5, A22 (2015) File

<http://www.swsc-journal.org/articles/swsc/pdf/2015/01/swsc140065.pdf>

**4 May**

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

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

A&A 2016

**4-5 May**

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

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

2019 ApJ 885 34

### 5-10 May

#### Observations of a Hybrid Double-Streamer/Pseudostreamer in the Solar Corona

Rachmeler, L. A., Platten, S. J., Bethge, C. W., Seaton, D. B., Yeates, A. R.

E-print, April 2014; ApJL

<http://arxiv.org/pdf/1312.3153v2.pdf>

10 May – 01:11: M3.9 вспышка, **пересвет** на STEREO-B,  $B=25.5^{\circ}/298=0,17$   
13:26: M1.3 вспышка, **пересвет** на STEREO-B,  $B=15^{\circ}/298=0,1$

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

#### Modern Faraday Rotation Studies to Probe the Solar Wind

Jason **Kooi**, David Wexler, Elizabeth Jensen, Megan Kenny, Teresa Nieves-Chinchilla, Lynn Wilson III, Brian Wood, Lan Jian, Shing Fung, Alexei Pevtsov, Nat Gopalswamy, and Ward Manchester  
Front. Astron. Space Sci., 9:841866. 2022 |

<https://doi.org/10.3389/fspas.2022.841866>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.841866/full>

<https://www.frontiersin.org/articles/10.3389/fspas.2022.841866/pdf>

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

Elizabeth A. **Jensen**<sup>1,2</sup>, Carl Heiles<sup>3</sup>, David Wexler<sup>4</sup>, Amanda A. Kepley<sup>5</sup>, Thomas Kuiper<sup>6</sup>, Mario M. Bisi<sup>7</sup>, Deborah Domingue Lorin<sup>1</sup>, Elizabeth V. Kuiper<sup>8</sup>, and Faith Vilas<sup>1</sup>,

Astrophysical Journal, 861:118 (12pp), 2018 July 10

<http://sci-hub.tw/http://iopscience.iop.org/0004-637X/861/2/118/>

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

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

**Liu**, Wei; Berger, Thomas E.; and Low, B. C.

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

[http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS\\_Liu\\_Berger\\_Low\\_funnel-prom.pdf](http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf)

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**12 - ? May – высокая активность; восточная область AR1748 has produced 4 X-овые LDE вспышки: an X1.7-class flare (02:17 UT on May 13), an X2.8-class flare (16:09 UT on May 13), an X3.2-class flare (01:17 UT on May 14), and an X1.2-class flare (01:52 on May 15).**  
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12 May – 20:36: M1.9 вспышка, **пересвет** на STEREO-B,  $B=10^{\circ}/300=0,07$

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

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

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

Moritz **Hübner**<sup>1,2</sup>, Daniela Huppenkothen<sup>3</sup>, Paul D. Lasky<sup>1,2</sup>, and Andrew R. Inglis<sup>4,5</sup>  
2022 ApJS 259 32  
<https://iopscience.iop.org/article/10.3847/1538-4365/ac49ec/pdf>

**Multi-viewpoint Coronal Mass Ejection Catalog Based on STEREO COR2 Observations**  
Angelos **Vourlidas**<sup>1,4</sup>, Laura A. Balmaceda<sup>2,5,6</sup>, Guillermo Stenborg<sup>3</sup>, and Alisson Dal Lago<sup>2</sup>  
2017 ApJ 838 141 **File**  
<http://sci-hub.cc/10.3847/1538-4357/aa67f0>

**13 May** – 02:16: X1.7 **пересвет**  $B=125*2/300=0,83$   $\leftarrow 16s$   $8s \rightarrow B=125/300=0,417$   
16:15: X2.8 **пересвет**,  $B=172*2/300=1,15$   $\leftarrow 16s$   $8s \rightarrow$  **16:06**  $B=143*2/300=0.953$

**13 May** – 02:17: **X1.7 LDE вспышка** вблизи E-лимба; **S15~2300 sfu**; мощный CME  
**16:05: X2.8/1N LDE** вспышка, N11E85, **S15~5700 sfu**; мощный CME **Gamma**  
И еще эрупции на W-лимбе

**Towards Interpretable Solar Flare Prediction with Attention-based Deep Neural Networks**  
Chetraj **Pandey**, Anli Ji, Rafal A. Angryk, Berkay Aydin  
The 6th International Conference on Artificial Intelligence and Knowledge Engineering (AIKE), 2023  
<https://arxiv.org/pdf/2309.04558.pdf>

**Magnetic Flux Ropes in the Solar Corona: Structure and Evolution toward Eruption**  
**Review**  
**Rui Liu**  
Research in Astron. Astrophys (RAA) 2020  
<https://arxiv.org/pdf/2007.11363.pdf> **File**

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

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

Nat **Gopalswamy**<sup>1</sup>, Pertti Mäkelä<sup>1,2</sup>, Seiji Yashiro<sup>1,2</sup>, Alejandro Lara<sup>1,2</sup>, Hong Xie<sup>1,2</sup>, Sachiko Akiyama<sup>1,2</sup>, and Robert J. MacDowall<sup>1</sup>  
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Jinhua **Shen**<sup>1,2</sup>, Ya Wang<sup>3,4</sup>, Tuanhui Zhou<sup>3,5</sup>, and Haisheng Ji<sup>3,5</sup>  
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### **Thermal Properties of Current Sheet Plasmas in Solar Flares**

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Jinhua [Shen](#)<sup>1,2</sup>, Jianping Li<sup>3</sup>, Yu Huang<sup>3</sup>, Dong Li<sup>3</sup>, Yingna Su<sup>3</sup>, and Haisheng Ji<sup>3</sup>

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Juan-Carlos Martínez **Oliveros**<sup>1</sup>, Säm Krucker<sup>1,2</sup>, Hugh S. Hudson<sup>1,3</sup>, Pascal Saint-Hilaire<sup>1</sup>, Hazel Bain<sup>1</sup>, Charles Lindsey<sup>4</sup>, Rick Bogart<sup>5</sup>, Sébastien Couvidat<sup>5</sup>, Phil Scherrer<sup>5</sup>, and Jesper Schou<sup>6</sup>

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## Thermal Properties of Current Sheet Plasmas in Solar Flares

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Melissa **Pesce-Rollins**

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Nat [Gopalswamy](#)<sup>1</sup>, Pertti Mäkelä<sup>1,2</sup>, Seiji Yashiro<sup>1,2</sup>, Alejandro Lara<sup>1,2</sup>, Hong Xie<sup>1,2</sup>, Sachiko Akiyama<sup>1,2</sup>, and Robert J. MacDowall<sup>1</sup>  
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Brian R. **Dennis**<sup>1</sup>, Anne K. Tolbert<sup>1,2</sup>, Andrew Inglis<sup>1,2</sup>, Jack Ireland<sup>1,3</sup>, Tongjiang Wang<sup>1,2</sup>, Gordon D. Holman<sup>1</sup>, Laura A. Hayes<sup>3,4</sup>, and Peter T. Gallagher  
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<http://arxiv.org/pdf/1412.3045v1.pdf>

### **1-15 May**

**Variation of Coronal Activity from the Minimum to Maximum of Solar Cycle 24 using Three Dimensional Coronal Electron Density Reconstructions from STEREO/COR1**  
Tongjiang **Wang**, Nelson L. Reginald, Joseph M. Davila, O. Chris St. Cyr, William T. Thompson  
Solar Phys. **2017**

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

**14 May-11 June**

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

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

Solar Phys. **2020**

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

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

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

### The Spatial and Temporal Variations of Turbulence in a Solar Flare

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

ApJ **2021**

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

### First Fermi-LAT Solar Flare **Catalog**

M. **Ajello**<sup>1</sup>, L. Baldini<sup>2</sup>, D. Bastieri<sup>3,4</sup>, R. Bellazzini<sup>5</sup>, A. Berretta<sup>6</sup>, E. Bissaldi<sup>7,8</sup>, R. D. Blandford<sup>9</sup>, R. Bonino<sup>10,11</sup>, P. Bruel<sup>12</sup>, S. Buson<sup>13</sup>Show full author list

**2021** ApJS 252 13

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

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

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

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

ApJ **2020**

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

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

Melissa **Pesce-Rollins**

**Presentation** at the Fleishman Webinar Nov. 13, **2019**

[http://www.ioffe.ru/LEA/SF\\_AR/files/FermiLATSolarFlares\\_webinar.pdf](http://www.ioffe.ru/LEA/SF_AR/files/FermiLATSolarFlares_webinar.pdf)

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

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

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

**2019**

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

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

G. A. **de Nolfo**, [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevskaya](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ **2019**

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

### HIGH-ENERGY GAMMA-RAY OBSERVATIONS OF SOLAR FLARES WITH THE FERMI LARGE AREA TELESCOPE **Thesis Catalog** (2010-2017)

**Allafort**, A. J.

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

[https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort\\_Thesis\\_final\\_Dec13-augmented.pdf](https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf)

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

Nat [Gopalswamy](#)<sup>1</sup>, Pertti Mäkelä<sup>1,2</sup>, Seiji Yashiro<sup>1,2</sup>, Alejandro Lara<sup>1,2</sup>, Hong Xie<sup>1,2</sup>, Sachiko Akiyama<sup>1,2</sup>, and Robert J. MacDowall<sup>1</sup>  
2018 ApJL 868 L19

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

## **Coronal hard X-ray sources revisited**

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

ApJ 2018

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

## **Characteristics of Sustained >100 $\gamma$ -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](http://www.astro.umd.edu/~share/publications/share_2017.pdf) File

## **Turbulent kinetic energy in the energy balance of a solar flare**

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

Physical Review Letters 2017

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

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

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

A&A 2016

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

## **Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and Online Catalog**

Patrick I. [McCauley](#), Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves

Solar Phys. 2015

<http://arxiv.org/pdf/1505.02090v1.pdf>

## **Estimating the Height of CMEs Associated with a Major SEP Event at the Onset of the Metric Type II Radio Burst during Solar Cycles 23 and 24**

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

ApJ 2015

<http://cdaw.gsfc.nasa.gov/publications/makela/makela2015ApJ.pdf>

## **Soft X-ray Pulsations in Solar Flares**

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

Solar Phys. 2015

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

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

## **The relationships among solar flare impulsiveness, energy release, and ribbon development**

[Cole A Tamburri](#), [Maria D Kazachenko](#), [Adam F Kowalski](#)

ApJ 2024

<https://arxiv.org/pdf/2403.02457.pdf>

## Observing the Sun with the Murchison Widefield Array

D. **Oberoi** (1), R. Sharma (1), S. Bhatnagar (2), C. J. Lonsdale (3), L. D. Matthews (3), I. H. Cairns and many others

31st URSI General Assembly and Scientific Symposium, 2014

<http://arxiv.org/pdf/1403.6250v1.pdf>

### 16-17 May

#### When do solar erupting hot magnetic flux ropes form?

[A. Nindos](#), [S. Patsourakos](#), [A. Vourlidas](#), [X. Cheng](#), [J. Zhang](#)

A&A 2020

<https://arxiv.org/pdf/2008.04380.pdf>

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

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

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

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

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

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

R.D. **Cunha-Silva**, F.C.R. Fernandes, C.L. Selhorst

Advances in Space Research Volume 56, Issue 12, 15 December 2015, Pages 2804–2810

<http://www.sciencedirect.com/science/article/pii/S0273117715005311>

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

C. **Kuckein** (1), M. Collados (2,3), R. Manso Sainz (2,3), A. Asensio Ramos

the conference proceedings of the IAUS 305: "Polarimetry: From the Sun to Stars and Stellar Environments" 2015

<http://arxiv.org/pdf/1502.05505v1.pdf>

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

C. **Kuckein**<sup>1</sup>, M. Collados<sup>2,3</sup>, and R. Manso Sainz

2015 ApJ 799 L25

<http://arxiv.org/pdf/1501.04207v1.pdf>

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

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

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

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

#### The effect of continuous geomagnetic storms on enhancements of ultrarelativistic electrons in the Earth's outer radiation belt

Jingrun **Chen**, Jingrun Chen, Chaoling Tang, and Xinxin Chu

Front. Astron. Space Sci. 11: 1381764. 2024

<https://doi.org/10.3389/fspas.2024.1381764>

<https://www.frontiersin.org/articles/10.3389/fspas.2024.1381764/full>

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

А.А.Головко

ИКИ-2014, Сессия: Солнце

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

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

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

### When do solar erupting hot magnetic flux ropes form?

[A. Nindos](#), [S. Patsourakos](#), [A. Vourlidas](#), [X. Cheng](#), [J. Zhang](#)

A&A 2020

<https://arxiv.org/pdf/2008.04380.pdf>

### Homologous Flux Ropes Observed by SDO/AIA

Ting [Li](#) & Jun Zhang

E-print, Oct 2013; ApJL

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

**21 May**

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

Yanxiao [Liu](#)<sup>1,2,3</sup>, Yongyuan Xiang<sup>1,3</sup>, Robertus Erdélyi<sup>4,5</sup>, Zhong Liu<sup>1,3</sup>, Dong Li<sup>6,7</sup>, Zongjun Ning<sup>6,7</sup>, Yi Bi<sup>1,2,3</sup>, Ning Wu<sup>8</sup>, and Jun Lin<sup>1,3</sup>

2018 ApJ 856 17

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

**21-23 May**

### Seeds and Sequences of Element Abundances in Solar Energetic Particle Events Review

Donald V. [Reames](#)

Space Sci. Rev 2024

<https://arxiv.org/pdf/2404.05048.pdf> File

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

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

ApJ 2019

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

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

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

### Estimating the total energy content in escaping accelerated solar electron beams

[Alexander W. James](#), [Hamish A. S. Reid](#)

ApJ 2024  
<https://arxiv.org/pdf/2409.15091>

### **The effect of continuous geomagnetic storms on enhancements of ultrarelativistic electrons in the Earth's outer radiation belt**

Jingrun **Chen**, Jingrun Chen, Chaoling Tang, and Xinxin Chu  
Front. Astron. Space Sci. 11: 1381764. 2024

<https://doi.org/10.3389/fspas.2024.1381764>  
<https://www.frontiersin.org/articles/10.3389/fspas.2024.1381764/full>

### **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>

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

Томозов В.М., Минасянц Г.С., Минасянц Т.М.  
СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 9 № 4 , 2023 С. 38–43.  
<https://naukaru.ru/ru/storage/viewWindow/138048>

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

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

MNRAS 2023  
<https://arxiv.org/pdf/2304.11307.pdf>

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

Xiaoyan **Xie**<sup>1,2,3</sup>, Katharine K. Reeves<sup>2</sup>, Chengcai Shen<sup>2</sup>, and Joshua D. Ingram<sup>4,2</sup>  
2022 ApJ 933 15

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

### **Coronal Quasi-periodic Fast-mode Propagating Wave Trains**

**Review**

[Yuandeng Shen](#), [Xinping Zhou](#), [Yadan Duan](#), [Zehao Tang](#), [Chengrui Zhou](#), [Song Tan](#)

Solar Phys. 2022  
<https://arxiv.org/pdf/2112.14959.pdf> File

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

Donald V. **Reames**

Solar Phys. 2021  
<https://arxiv.org/ftp/arxiv/papers/2112/2112.01568.pdf> File

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

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

Solar Phys. 2021  
<https://arxiv.org/pdf/2108.12990.pdf>

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

[D. E. Morosan](#), [E. Palmerio](#), [J. E. Räsänen](#), [E. K. J. Kilpua](#), [J. Magdalenic](#), [B. J. Lynch](#), [A. Kumari](#), [J. Pomoell](#), [M. Palmroth](#)  
A&A 2020  
<https://arxiv.org/pdf/2008.10245.pdf>

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

Navin Chandra [Joshi](#), Alphonse C. Sterling, Ronald L. Moore, Bhuwan Joshi  
ApJ 2020  
<https://arxiv.org/abs/2008.04525>

### **Small Size Ground Level Enhancements During Solar Cycle 24**

Leonty I. [Miroshnichenko](#), [Chuan Li](#) & [Victor G. Yanke](#)  
[Solar Physics](#) volume 295, Article number: 102 (2020)  
<https://link.springer.com/content/pdf/10.1007/s11207-020-01659-3.pdf>

### **The Nature and Origin of Moving Solar Radio Bursts Associated with Coronal Mass Ejections**

Diana [Morosan](#), Emilia Kilpua, Erika Palmerio, Benjamin Lynch, Jens Pomoell, Rami Vainio, Minna Palmroth, Juska Räsänen  
EGU2020 Presentation #5379 File

### **Initiation and Early Kinematic Evolution of Solar Eruptions**

X. [Cheng](#), [J. Zhang](#), [B. Kliem](#), [T. Török](#), [C. Xing](#), [Z. J. Zhou](#), [B. Inhester](#), [M. D. Ding](#)  
ApJ 2020  
<https://arxiv.org/pdf/2004.03790.pdf>

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

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

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

Michael S. [Freed](#)<sup>1,2</sup> and David E. McKenzie<sup>1,3</sup>  
2018 ApJ 866 29  
<http://sci-hub.tw/http://iopscience.iop.org/article/10.3847/1538-4357/aadee4/meta>

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

[Leon Ofman](#), [Wei Liu](#)  
ApJ 860 54 2018  
<https://arxiv.org/pdf/1805.00365.pdf>

### **Abundances, Ionization States, Temperatures, and FIP in Solar Energetic Particles**

Donald V. [Reames](#)  
Space Sci. Rev 2017  
<https://arxiv.org/ftp/arxiv/papers/1709/1709.00741.pdf>

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

Firas [Al-Hamadani](#), Silja Pohjolainen, Eino Valtonen  
[Solar Physics](#) September 2017, 292:127  
<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1148-6.pdf>

### **Origin and Structures of Solar Eruptions I: Magnetic Flux Rope (Invited **Review**)**

X. [Cheng](#), Y. Guo, M. D. Ding  
SCIENCE CHINA Earth Sciences 2017 File  
<https://arxiv.org/pdf/1705.08198.pdf>



## **Characterizing Solar Energetic Particle Event Profiles with Two-Parameter Fits**

Stephen W. [Kahler](#), Alan G. Ling

Solar Physics April 2017, 292:59

<http://link.springer.com/content/pdf/10.1007%2Fs11207-017-1085-4.pdf>

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

Jae-Ok [Lee](#)<sup>1,2</sup>, Y.-J. Moon<sup>1</sup>, Jin-Yi Lee<sup>3</sup>, R.-S. Kim<sup>2</sup>, and K.-S. Cho<sup>2</sup>

2017 ApJ 838 70

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

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

P. [Kühl](#), N. Dresing, B. Heber, A. Klassen

Solar Physics January 2017, 292:10

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

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

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

41st COSPAR Scientific Assembly, abstracts from the meeting that was to be held 30 July - 7 August 2016 at the Istanbul Congress Center (ICC), Turkey, but was cancelled. Abstract D2.1-9-16

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

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

ApJ 2016

<http://arxiv.org/pdf/1606.06989v1.pdf>

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

Markus J. [Aschwanden](#)

ApJ 2016

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

[http://www.lmsal.com/~aschwand/eprints/2016\\_global4.pdf](http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf)

## **Temperature of the Source Plasma in Gradual Solar Energetic Particle Events**

Donald V. [Reames](#)

Solar Phys. 2015

<http://arxiv.org/pdf/1509.08948v1.pdf>

## **High-energy solar particle events in cycle 24**

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

The 14th International Astrophysics Conference held in Tampa, FL during April 24-29, 2015. Accepted for publication in Journal of Physics: Conference Series (JPCS). edited by G. Zank, 2015

<http://arxiv.org/ftp/arxiv/papers/1507/1507.06162.pdf>; File

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

Liu-Guan [Ding](#)<sup>1,2</sup>, Gang Li<sup>2</sup>, Yong Jiang<sup>3</sup>, Gui-Ming Le<sup>4</sup>, Cheng-Long Shen<sup>5</sup>, Yu-Ming Wang<sup>5</sup>, Yao Chen<sup>6</sup>, Fei Xu<sup>1</sup>, Bin Gu<sup>1</sup>, and Ya-Nan Zhang

2014 ApJ 793 L35.

## **Homologous Flux Ropes Observed by SDO/AIA**

Ting [Li](#) & Jun Zhang

E-print, Oct 2013; ApJL  
<http://arxiv.org/abs/1310.8041>

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

X. **Cheng**, M. D. Ding, Y. Guo, J. Zhang, A. Vourlidas, Y. D. Liu, O. Olmedo, J. Q. Sun, and C. Li

E-print, Oct 2013, File; ApJ

**22-23 May**

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

E. **Romero-Hernandez**, J. A. Gonzalez-Esparza, E. Aguilar-Rodriguez, V. Ontiveros-Hernandez, P. Villanueva-Hernandez

Solar Phys. Volume 290, Issue 9, pp 2553-2566 2015

### The Interaction of Successive Coronal Mass Ejections: A **Review**

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

Sol Phys (2017) 292: 64. **File**

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

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

T. **Alberti**<sup>1</sup>, M. Laurenza<sup>2</sup>, E. W. Cliver<sup>3</sup>, M. Storini<sup>2</sup>, G. Consolini<sup>2</sup>, and F. Lepreti

2017 ApJ 838 59 **File**

<http://sci-hub.cc/10.3847/1538-4357/aa5cb8>

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

L.M. **Winter**, K. Ledbetter

ApJ 2015

<http://arxiv.org/pdf/1507.01620v1.pdf>

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

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

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

ApJ 2019

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

**23-24 May**

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

Donald V. **Reames**

Solar Phys. 2021

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

## **Inflows in the Inner White-light Corona: The Closing-down of Flux after Coronal Mass Ejections**

P. [Hess](#) and Y.-M. Wang

2017 ApJ 850 6

<http://sci-hub.cc/10.3847/1538-4357/aa921d>

### **25 May**

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

Sargam M. [Mulay](#), Durgesh Tripathi, Giulio Del Zanna, Helen Mason

A&A 2016

### **27-31 May**

## **Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars**

Johan L. Freiherr [von Forstner](#), [Jingnan Guo](#), [Robert F. Wimmer-Schweingruber](#), [Donald M. Hassler](#), [Manuela Temmer](#), [Mateja Dumbović](#), [Lan K. Jian](#), [Jan K. Appel](#), [Jaša Čalogović](#), [Bent Ehresmann](#), [Bernd Heber](#), [Henning Lohf](#), [Arik Posner](#), [Christian T. Steigies](#), [Bojan Vršnak](#), [Cary J. Zeitlin](#)

JGR 2017

<https://arxiv.org/pdf/1712.07301.pdf>

## **Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures**

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

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

### **28 May – 6 June**

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

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

ApJ 2017

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

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

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

ApJL 2016

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

### **29 May**

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

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

Advances in Space Research 2023

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

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

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

Solar Phys. 2021

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

## Earth-affecting Solar Transients: A **Review** of Progresses in Solar Cycle 24

Jie **Zhang**, [Manuela Temmer](#), [Nat Gopalswamy](#), [Olga Malandraki](#), [Nariaki V. Nitta](#), [Spiros Patsourakos](#), [Fang Shen](#), [Bojan Vršnak](#), [Yuming Wang](#), [David Webb](#), [Mihir I. Desai](#), [Karin Dissauer](#), [Nina Dresing](#), [Mateja Dumbović](#), [Xueshang Feng](#), [Stephan G. Heinemann](#), [Monica Laurenza](#), [Noé Lugaz](#), [Bin Zhuang](#)

<https://arxiv.org/ftp/arxiv/papers/2012/2012.06116.pdf> File 2021

2020 <https://arxiv.org/abs/2012.06116>

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

S. G. **Heinemann**<sup>1</sup>, V. Jerčić<sup>1,2</sup>, M. Temmer<sup>1</sup>, S. J. Hofmeister<sup>1</sup>, M. Dumbović<sup>1,3</sup>, S. Vennerstrom<sup>4</sup>, G. Verbanac<sup>5</sup> and A. M. Veronig<sup>1,6</sup>

A&A 638, A68 (2020)

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

## Statistical Analysis and Catalog of Non-polar Coronal Holes Covering the SDO-Era Using CATCH

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

Solar Phys. 294:144 2019

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

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1539-y.pdf>

## Coronal Hole Statistical Analysis and Catalogue covering the SDO-era

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

Solar Phys. 2019

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

## **30 May** – CH

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

Stefan J. **Hofmeister**<sup>1</sup>, Astrid Veronig<sup>1</sup>, Martin A. Reiss<sup>1</sup>, Manuela Temmer<sup>1</sup>, Susanne Vennerstrom<sup>2</sup>, Bojan Vršnak<sup>3</sup>, and Bernd Heber<sup>4</sup>

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

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

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

Nat **Gopalswamy**, Bruce Tsurutani, Yihua Yan

Progress in Earth and Planetary Science, 2015

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

## **30 May-1 Jun**

### The Sun and Space Weather **Review**

[Nat Gopalswamy](#)

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

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

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

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

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

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

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

[Markus J. Aschwanden](#)

ApJ 2021

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

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

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

[http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG\\_v13\\_No1\\_2018-pp-25-30.pdf](http://newserver.stil.bas.bg/SUNGEO//00SGArhiv/SG_v13_No1_2018-pp-25-30.pdf)

[http://ws-sozopol.stil.bas.bg/2017Sunny/Proceedings2017\\_V3.pdf](http://ws-sozopol.stil.bas.bg/2017Sunny/Proceedings2017_V3.pdf)

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

[S. Watari](#)

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

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

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

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

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

## Can We Determine the Filament Chirality by the Filament Footpoint Location or the Barb-bearing?

Q. [Hao](#), Y. Guo, C. Fang, [P. F. Chen](#), [W. Cao](#)

RAA 2015

<http://arxiv.org/pdf/1506.08490v1.pdf>

### 31 May-3 Jun

#### Thermosphere modeling capabilities assessment: geomagnetic storms

Sean [Bruinsma](#)<sup>1\*</sup>, Claude Boniface<sup>1</sup>, Eric K. Sutton<sup>2</sup> and Mariangel Fedrizzi<sup>3</sup>

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

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

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

See ApLS Volume 229, Number 1, 2017

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

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### 31 May-14 June

#### Active region fine structure observed at 0.08 arcsec resolution

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

A&A 2016

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

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

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

**S. Watari**

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

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

### **Interplanetary Magnetic Flux Ropes as Agents Connecting Solar Eruptions and Geomagnetic Activities**

K. [Marubashi](#), K.-S. Cho, H. Ishibashi

[Solar Physics](#) December **2017**, 292:189

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1204-2.pdf>

### **On the effect of geomagnetic storms on relativistic electrons in the outer radiation belt: Van Allen Probes observations†**

Pablo. S. [Moya](#), Víctor A. Pinto, David G. Sibeck, Shrikanth G. Kanekal, Daniel N. Baker

JGR **2017**

[\[hub.cc/http://onlinelibrary.wiley.com/doi/10.1002/2017JA024735/abstract;jsessionid=48E043E86C22084A1908FD5A8ADEDAFC.f03t01\]\(http://onlinelibrary.wiley.com/doi/10.1002/2017JA024735/abstract;jsessionid=48E043E86C22084A1908FD5A8ADEDAFC.f03t01\)](http://sci-</a></p></div><div data-bbox=)

### **Understanding Problem Forecasts of ISEST Campaign Flare-CME Events**

David [Webb](#), Nariaki Nitta

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

### **Webb\_ISEST (International Study for Earth-Affecting Solar Transients) \_MM WG4 Campaign Events\_2014, File**

See [http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_ICME%5CCME\\_Lists](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_ICME%5CCME_Lists)

### **A propagation tool to connect remote-sensing observations with in-situ measurements of heliospheric structures**

A.P. [Rouillard](#), B. Lavraud, V. Genot, M. Bouchemit, N. Dufourg, I. Plotnikov, R.F. Pinto, E. Sanchez-Diaz, M. Lavarra, M. Penou, C. Jacquy, N. Andre, S. Caussarieu, J.-P. Toniutti, D. Popescu, E. Buchlin, S. Caminade, P. Alingery, J.A. Davies, D. Odstrcil, L. Mays

Planetary and Space Science **2017**

<https://arxiv.org/pdf/1702.00399v1.pdf>

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

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

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

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

See p. **30**

### **1-7 June**

### **The effect of continuous geomagnetic storms on enhancements of ultrarelativistic electrons in the Earth's outer radiation belt**

Jingrun [Chen](#), Jingrun Chen, Chaoling Tang, and Xinxin Chu

Front. Astron. Space Sci. **11**: 1381764. **2024**

<https://doi.org/10.3389/fspas.2024.1381764>

<https://www.frontiersin.org/articles/10.3389/fspas.2024.1381764/full>

### **2 June**

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

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

A&A 2022  
<https://arxiv.org/pdf/2203.05231.pdf>

## Observation and Modeling of Solar Jets

Review

[Yuandeng Shen](#)

Proceedings of the Royal Society A 2021  
<https://arxiv.org/pdf/2101.04846.pdf>

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

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

ApJ 2019  
<https://arxiv.org/pdf/1908.03660.pdf>

## 2-6 June

### Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures

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

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

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

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

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

## MATERIAL SUPPLY AND MAGNETIC CONFIGURATION OF AN ACTIVE REGION FILAMENT

P. [Zou](#)<sup>1,2,3</sup>, C. Fang<sup>1,2,3</sup>, P. F. Chen<sup>1,2,3</sup>, K. Yang<sup>1,2,3</sup>, Q. Hao<sup>1,2,3</sup>, and Wenda Cao<sup>4</sup>  
2016 ApJ 831 123

## 6-7 – форбуш и буря Dst~-75 нТл

### The effect of continuous geomagnetic storms on enhancements of ultrarelativistic electrons in the Earth's outer radiation belt

Jingrun [Chen](#), Jingrun Chen, Chaoling Tang, and Xinxin Chu

Front. Astron. Space Sci. 11: 1381764. 2024

<https://doi.org/10.3389/fspas.2024.1381764>

<https://www.frontiersin.org/articles/10.3389/fspas.2024.1381764/full>

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

Jie [Hong](#), M. D. Ding, Ying Li, Cheng Fang, Wenda Cao

ApJ, 2014

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

## 6 June –

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

## Spectral Diagnostics of Solar Photospheric Bright Points

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

ApJ 2020

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

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

N. [Gopalswamy](#), S. Yashiro<sup>1,2</sup>, H. Xie<sup>1,2</sup>, S. Akiyama<sup>1,2</sup> and P. Mäkelä

JGR 2015

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

### Diagnostics of Ellerman Bombs with High-resolution Spectral Data

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

RAA 2015

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

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

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

### When do solar erupting hot magnetic flux ropes form?

[A. Nindos](#), [S. Patsourakos](#), [A. Vourlidas](#), [X. Cheng](#), [J. Zhang](#)

A&A 2020

<https://arxiv.org/pdf/2008.04380.pdf>

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

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

ApJ 2015

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

### 8 June

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

Angelos [Vourlidas](#)<sup>1,4</sup>, Laura A. Balmaceda<sup>2,5,6</sup>, Guillermo Stenborg<sup>3</sup>, and Alisson Dal Lago<sup>2</sup>

2017 ApJ 838 141 [File](#)

<http://sci-hub.cc/10.3847/1538-4357/aa67f0>

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

Michael [Freed](#), Dana Longcope, David McKenzie

Solar Physics, 2014

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

### 10 June

#### The nonpotentiality of coronae of solar active regions, the dynamics of the surface magnetic field, and the potential for large flares

C.J. [Schrijver](#)

ApJ 2016

<http://arxiv.org/pdf/1602.07244v1.pdf>

### 11-14 Jun

#### Magnetic helicity evolution during active region emergence and subsequent flare productivity

[Zheng Sun](#), [Ting Li](#), [Quan Wang](#), [Shangbin Yang](#), [Mei Zhang](#), [Yajie Chen](#)

A&A 2024

<https://arxiv.org/pdf/2403.18354.pdf>



**12 June**

**Preprocessing of vector magnetograms for magnetohydrostatic extrapolations**

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

A&A 2020

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

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

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

A&A 2020

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

**Cancellation of Small-Scale Magnetic Features**

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

A&A 2019

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

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

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

A&A 2018

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

**A Cancellation Nanoflare Model for Solar Chromospheric and Coronal Heating**

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

2018

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

**Observations of solar chromospheric heating at sub-arcsec spatial resolution**

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

A&A 2018

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

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

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

Astrophysical Journal Supplement Series 2017

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

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

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

ApJS 2017 Sunrise special issue

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

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

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

ApJS 2016

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

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

L. P. **Chitta**, H. Peter, S. K. Solanki, P. Barthol, A. Gandorfer, L. Gizon, J. Hirzberger, T. L. Riethmueller, M. van Noort, J. Blanco Rodriguez, J. C. Del Toro Iniesta, D. Orozco Suarez, W. Schmidt, V. Martinez Pillet, M. Knoelker  
Astrophysical Journal Supplement Series      **2016**  
<https://arxiv.org/pdf/1610.07484v1.pdf>

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

Rebecca **Centeno**, Julian Blanco Rodriguez, Jose Carlos Del Toro Iniesta, Sami K. Solanki, Peter Barthol, Achim Gandorfer, Laurent Gizon, Johann Hirzberger, Tino L. Riethmuller, Michiel van Noort, David Orozco Suarez, Wolfgang Schmidt, Valentin Martinez Pillet, Michael Knolker  
the Sunrise II Special Issue in the Astrophysical Journal Supplement Series      **2016**  
<https://arxiv.org/pdf/1610.03531v1.pdf>

### **Photospheric response to EB-like event**

S. **Danilovic**, S. K. Solanki, P. Barthol, A. Gandorfer, L. Gizon, J. Hirzberger, T. L. Riethmüller M. van Noort, J. Blanco Rodríguez, J. C. Del Toro Iniesta, D. Orozco Suárez, W. Schmidt, V. Martínez Pillet, M. Knölker  
ApJS      **2016**  
<http://arxiv.org/pdf/1609.03817v1.pdf>

### **Filaments and Magnetic Memory in the Solar Corona**

Anthony **Yeates**  
UKSP Nugget: 47, **2014**  
<http://www.uksolphys.org/uksp-nugget/47-filaments-and-magnetic-memory-in-the-solar-corona/>

### **12-13 June**

#### **Power spectrum of turbulent convection in the solar photosphere**

[L. Yelles Chaouche](#), [R. H. Cameron](#), [S. K. Solanki](#), et al.  
A&A      **2020**  
<https://arxiv.org/pdf/2010.09037.pdf>

### **13 June**

#### **Intensity and velocity oscillations in a flaring active region**

David C L **Millar**, Lyndsay Fletcher, Jayant Joshi  
*Monthly Notices of the Royal Astronomical Society*, Volume 527, Issue 3, January **2024**, Pages 5916–5928,  
<https://doi.org/10.1093/mnras/stad3386>  
<https://academic.oup.com/mnras/article-pdf/527/3/5916/54021982/stad3386.pdf>  
<https://watermark.silverchair.com/stad3386.pdf>

#### **Particle Acceleration in Plasmoid Ejections Derived from Radio Drifting Pulsating Structures**

N. **Nishizuka**<sup>1</sup>, M. Karlický<sup>2</sup>, M. Janvier<sup>3</sup>, and M. Bárta  
**2015** ApJ 799 126  
<http://arxiv.org/pdf/1412.7904v1.pdf>

### **13-15 Jun**

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

Bin **Zhuang**<sup>1</sup>, Noé Lugaz<sup>1</sup>, Nada Al-Haddad<sup>1</sup>, Réka M. Winslow<sup>1</sup>, Camilla Scolini<sup>1</sup>, Charles J. Farrugia<sup>1</sup>, and Antoinette B. Galvin<sup>1</sup>

2023 ApJ 952 7

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

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

#### 14 June

##### **Multi-mode quasi-periodic pulsations in a solar flare**

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

A&A, 574, A53 (2015)

E-print, Dec 2014

##### **High Resolution Observations of Chromospheric Jets in Sunspot Umbra**

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

E-print, April 2014, ApJ, 2014

[http://www.bbso.njit.edu/~vayur/spikes/VYurchyshyn\\_Spikes.pdf](http://www.bbso.njit.edu/~vayur/spikes/VYurchyshyn_Spikes.pdf)

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

#### 14-20 June

##### **A Semi-Automatic Method to Measure the Rotation of Sunspots**

**Daniel Brown** & **Andrew Walker**

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

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

#### 17-18 June

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

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

A&A 2016

#### 18-19 June

##### **Photospheric signatures of CME onset**

**Aslam Ottupara**, **David MacTaggart**, **Tom Williams**, **Lyndsay Fletcher**, **Paolo Romano**

MNRAS 2024

<https://arxiv.org/pdf/2409.07261>

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

**Lijuan Liu**, **Yuming Wang**, **Zhenjun Zhou**, **Jun Cui**

ApJ 2021

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

#### 19 June

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

Mykola **Gordovskyy**<sup>1,2</sup>, Philippa K. Browning<sup>2</sup>, Kanya Kusano<sup>3</sup>, Satoshi Inoue<sup>4</sup>, and Grigory E. Vekstein<sup>2</sup>

2023 ApJ 952 75

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

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

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

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

ApJ 2017

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

### **Arcade Implosion Caused by a Filament Eruption in a Flare**

Juntao **Wang**, P. J. A. Simoes, L. Fletcher, J. K. Thalmann, H. S. Hudson, I. G. Hannah

ApJ 2016

<https://arxiv.org/pdf/1610.05931v1.pdf> File

### **Semicircular-like Secondary Flare Ribbons Associated with a Failed Eruption**

R. **Zheng**<sup>1</sup>, M. B. Korsós<sup>1,2</sup>, and R. Erdélyi

2015 ApJ 809 45

**19-22 June**

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

Ellis A. **Avallone**, [Xudong Sun](#)

ApJ 2020

<https://arxiv.org/pdf/2003.02814.pdf>

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

N. **Nishimura**, K. Marubashi, M. Tokumaru

*Solar Physics* April 2019, 294:49

<https://link.springer.com/content/pdf/10.1007%2F978-1-435-5.pdf>

### **Field distribution of magnetograms from simulations of active region formation**

S. **Dacie**<sup>1</sup>, L. van Driel-Gesztelyi<sup>1, 2, 3</sup>, P. Démoulin<sup>2</sup>, M. G. Linton<sup>4</sup>, J. E. Leake<sup>4,5</sup>, D.

MacTaggart<sup>6</sup> and M. C. M. Cheung<sup>7</sup>

A&A 606, A34 (2017)

<https://www.aanda.org/articles/aa/pdf/2017/10/aa30767-17.pdf>

**20 Jun**

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

[M. B. Korsos](#), [R. Erdelyi](#), [J. Liu](#), [H. Morgan](#)

2020

<https://arxiv.org/pdf/2012.08164.pdf>

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

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

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

Jinhye **Park**<sup>1</sup>, Hyun-Jin Jeong<sup>1</sup>, and Yong-Jae Moon<sup>1,2</sup>

2023 ApJ 953 159

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

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

M. B. **Korsós**<sup>1,2,3</sup>, R. Erdélyi<sup>2,3,4</sup>, X. Huang<sup>5</sup>, and H. Morgan<sup>1</sup>

2022 ApJ 933 66

<https://iopscience.iop.org/article/10.3847/1538-4357/ac7469/pdf>

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

Federica **Frassati**<sup>1</sup>, Monica Laurenza<sup>2</sup>, Alessandro Bemporad<sup>1</sup>, Matthew J. West<sup>3</sup>, Salvatore Mancuso<sup>1</sup>, Roberto Susino<sup>1</sup>, Tommaso Alberti<sup>2</sup>, and Paolo Romano<sup>4</sup>

2022 ApJ 926 227

<https://iopscience.iop.org/article/10.3847/1538-4357/ac460e/pdf>

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

N. **Gopalswamy**, **P. Mäkelä**

submitted to the URSI AP-RASC 2019 2018

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

## Time variations of observed H $\alpha$ line profiles and precipitation depths of non-thermal electrons in a solar flare

R. **Falewicz**, **K. Radziszewski**, **P. Rudawy**, **A. Berlicki**

ApJ 2017

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

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

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

ApJ 2017

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

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

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

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

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

**Liu**, Wei; Berger, Thomas E.; and Low, B. C.

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

[http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS\\_Liu\\_Berger\\_Low\\_funnel-prom.pdf](http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf)

**21-23 June** – слабые геомагнитные возмущения от большой КД

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

**21 June**

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

A. **Ippolito**<sup>1,2</sup>, C. Plainaki<sup>1</sup>, G. Zimbardo<sup>3</sup>, T. Alberti<sup>4</sup>, S. Massetti<sup>4</sup>, A. Milillo<sup>4</sup> and S. Orsini<sup>4</sup>

A&A 660, A50 (2022)

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

## The depth and the vertical extent of the energy deposition layer in a medium-class solar flare

Krzysztof [Radziszewski](#), [Robert Falewicz](#), [Pawel Rudawy](#)  
ApJ 2020  
<https://arxiv.org/pdf/2009.06064.pdf>

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

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

### **Time variations of observed H $\alpha$ line profiles and precipitation depths of non-thermal electrons in a solar flare**

R. [Falewicz](#), [K. Radziszewski](#), [P. Rudawy](#), [A. Berlicki](#)  
ApJ 847 84 2017  
<https://arxiv.org/pdf/1708.09797.pdf>  
<https://iopscience.iop.org/article/10.3847/1538-4357/aa89e9/pdf>

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

G.P. [Chernov](#), [V.V. Fomichev](#), [Y. Yan](#), [B. Tan](#), [Ch. Tan](#), [Q.Fu](#)  
Geomagnetism and Aeronomy 2017  
<https://arxiv.org/ftp/arxiv/papers/1711/1711.07531.pdf>

### **Complex Flare Dynamics Initiated by a Filament-Filament Interaction**

Chunming [Zhu](#), Rui Liu, David Alexander, Xudong Sun, James McAteer  
2015  
<http://arxiv.org/pdf/1507.05889v1.pdf>

### **Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and Online Catalog**

Patrick I. [McCauley](#), Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves  
Solar Phys. 2015  
<http://arxiv.org/pdf/1505.02090v1.pdf>

#### **22 June**

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

Jesse [Torres](#), [Lulu Zhao](#), [Philip K. Chan](#), [Ming Zhang](#)  
Space Weather e2021SW002797 2022  
<https://doi.org/10.1029/2021SW002797>  
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2021SW002797>

#### **22- 24 Jun**

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

T. [Alberti](#)<sup>1</sup>, M. Laurenza<sup>2</sup>, E. W. Cliver<sup>3</sup>, M. Storini<sup>2</sup>, G. Consolini<sup>2</sup>, and F. Lepreti  
2017 ApJ 838 59 File  
<http://sci-hub.cc/10.3847/1538-4357/aa5cb8>

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

### **Ring of Stations Method in Cosmic Rays Variations Research**

M. A. [Abunina](#), [A. V. Belov](#), [E. A. Eroshenko](#), [A. A. Abunin](#), [V. G. Yanke](#), [A. A. Melkumyan](#), [N. S. Shlyk](#) & [I. I. Pryamushkina](#)  
Solar Physics volume 295, Article number: 69 (2020)  
<https://link.springer.com/content/pdf/10.1007/s11207-020-01639-7.pdf>

## **Difference of source regions between fast and slow coronal mass ejections**

B. **Filippov**

PASAustralia 2019

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

## **Forbush Decreases during the DeepMin and MiniMax of Solar Cycle 24**

D. **Lingri**, H. Mavromichalaki, A. Belov, E. Eroshenko, V. Yanke, A. Abunin, M. Abunina

XXV European Cosmic Ray Symposium, Turin, Sept. 4-9 2016 2016

<https://arxiv.org/pdf/1612.08900v1.pdf>

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

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

2015 ApJ 805 25

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

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

Solar Physics, 2014

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

### **23-27 June**

#### **Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures**

Nariaki V. **Nitta**, Tamitha Mulligan

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

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

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

### **26 June**

#### **A Global Survey of EUV Corona Power Spectra**

Karl **Battams** (1), Brendan M. Gallagher (2), Robert S. Weigel (2) ((1) US Naval Research Laboratory, (2) George Mason University)

Solar Phys. 294 11 2019

<https://arxiv.org/pdf/1707.02448.pdf>

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1399-5.pdf>

#### **A Global Survey of EUV Corona Power Spectra**

Karl **Battams** (1), Brendan M. Gallagher (2), Robert S. Weigel (2) ((1) US Naval Research Laboratory, (2) George Mason University)

ApJ 2017

<https://arxiv.org/pdf/1707.02448.pdf>

### **26-30 June**

#### **Magnetic Power Spectra of Emerging Active Regions**

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

Solar Phys. 2019

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

### **27 June**

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

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

Ronald L. Moore, Sanjiv K. Tiwari, Navdeep K. Panesar, V. Aparna, Alphonse C. Sterling

ApJ 2024

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

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

Zhenghua Huang, Bo Li, Lidong Xia.

Solar-Terrestrial Physics. 2019. Vol. 5. Iss. 2, pp. 58–68

Solnechno-zemnaya fizika, 2019, Vol. 5. Iss. 2. P. 63–73

<https://naukaru.ru/en/storage/view/36901>

## Fitting and Reconstruction of Thirteen Simple Coronal Mass Ejections

Nada Al-Haddad, Teresa Nieves-Chinchilla, Neel P. Savani, Noe Lugaz, Iliia I. Roussev

Solar Phys. 2018

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

## Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars

Johan L. Freiherr von Forstner, Jingnan Guo, Robert F. Wimmer-Schweingruber, Donald M. Hassler, Manuela Temmer, Mateja Dumbović, Lan K. Jian, Jan K. Appel, Jaša Čalogović, Bent Ehresmann, Bernd Heber, Henning Lohf, Arik Posner, Christian T. Steigies, Bojan Vršnak, Cary J. Zeitlin

JGR 2017

<https://arxiv.org/pdf/1712.07301.pdf>

### 27-28 June

#### Multiwavelength Study of Equatorial Coronal-Hole Jets

Pankaj Kumar, Judith T. Karpen, Spiro K. Antiochos, Peter F. Wyper, C. Richard DeVore, Craig E. DeForest

ApJ 2019

<https://arxiv.org/pdf/1902.00922.pdf>

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

- приличный короткий форбуш

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

Nishtha Sachdeva

Ph.D. Thesis 2019

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

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

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

Beili Ying<sup>1</sup>, Alessandro Bemporad<sup>2,1</sup>, Li Feng<sup>1,3</sup>, Nariaki V. Nitta<sup>4</sup>, and Weiqun Gan<sup>1,3</sup>

2023 ApJ 942 3

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

### 30 June

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



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

### **Beam electrons as sources of H $\alpha$ ribbons in a C-class flare**

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

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

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

### **30 Jun-5 July**

#### **Earth-Affecting Coronal Mass Ejections Without Obvious Low Coronal Signatures**

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

### **1-2 July**

#### **Infls in the Inner White-light Corona: The Closing-down of Flux after Coronal Mass Ejections**

P. [Hess](#) and Y.-M. Wang  
**2017** ApJ 850 6  
<http://sci-hub.cc/10.3847/1538-4357/aa921d>

### **2 July**

#### **Conditions for electron-cyclotron maser emission in the solar corona**

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

#### **Real-time solar wind prediction based on SDO/AIA coronal hole data**

T. [Rotter](#) (1), A.M. Veronig (1), M. Temmer (1), B. Vrsnak  
[Solar Phys.](#) **2015**  
<http://arxiv.org/pdf/1501.06697v1.pdf>

### **2-12 July**

#### **Three-dimensional magnetic reconnection in a collapsing coronal loop system**

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

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

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

### **4 July**

#### **Statistical Studies on Modified Neupert Effect\***

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

<https://sci-hub.ru/10.1016/j.chinastron.2021.02.006>

### **Formation of Isolated Radio Type II Bursts at Low Frequencies**

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

Solar Phys. 2021

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

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

R. J. [Rutten](#), L. H. M. Rouppe van der Voort, G. J. M. Vissers

ApJ 2015

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

### **4-12 July**

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

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

2020

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

### **5 July**

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

See

[http://solar.gmu.edu/wiki/presentations/ISEST\\_2015\\_workshop/WG1\\_data/Nitta\\_stealthy\\_sun\\_earth\\_events.pdf](http://solar.gmu.edu/wiki/presentations/ISEST_2015_workshop/WG1_data/Nitta_stealthy_sun_earth_events.pdf)

### **Fan-shaped jets above the light bridge of a sunspot driven by reconnection\***

Carolina [Robustini](#)<sup>1</sup>, Jorrit Leenaarts<sup>1</sup>, Jaime de la Cruz Rodriguez<sup>1</sup> and Luc Rouppe van der Voort  
A&A 590, A57 (2016)

<http://www.aanda.org/articles/aa/pdf/2016/06/aa28022-15.pdf>

### **Peacock jets above the light bridge of a sunspot driven by reconnection**

Carolina [Robustini](#), Jorrit Leenaarts, Jaime de la Cruz Rodriguez, Luc Rouppe van der Voort  
ApJL 2015

<http://arxiv.org/pdf/1508.07927v1.pdf>

### **6 July – геомагнитная буря Dst~-73 нТл от северной КД**

The most likely source is a co-rotating interaction region associated with a northern hemisphere coronal hole (which rotated across the central meridian several days ago).

See

[http://solar.gmu.edu/wiki/presentations/ISEST\\_2015\\_workshop/WG1\\_data/Nitta\\_stealthy\\_sun\\_earth\\_events.pdf](http://solar.gmu.edu/wiki/presentations/ISEST_2015_workshop/WG1_data/Nitta_stealthy_sun_earth_events.pdf)

### **Long-period quasi-periodic oscillations of a small-scale magnetic structure on the Sun**

D. Y. [Kolotkov](#), V. V. Smirnova, P. V. Strelakova, A. Riehoainen, and V. M. Nakariakov  
A&A letters 2017

[http://www2.warwick.ac.uk/fac/sci/physics/research/cfsa/people/kolotkov/eprints/facula\\_letter\\_r2.pdf](http://www2.warwick.ac.uk/fac/sci/physics/research/cfsa/people/kolotkov/eprints/facula_letter_r2.pdf)

### **7-9 July**

### **Homologous Cyclones in the Quiet Sun**

Xinting [Yu](#)<sup>1,2</sup>, Jun Zhang<sup>1</sup>, Ting Li<sup>1</sup>, Yuzong Zhang<sup>1</sup>, and Shuhong Yang  
2014 ApJ 782 L15

### **8 July**

### **In situ measurements of the variable slow solar wind near sector boundaries**

E. [Sanchez-Diaz](#) (IRAP), [A. Rouillard](#), [B. Lavraud](#) (IRAP), [E. Kilpua](#) (FMI), [J. Davies](#)  
ApJ 2019  
<https://arxiv.org/ftp/arxiv/papers/1911/1911.09683.pdf>

### **A Systematic Approach to the Reconstruction of Saturated SDO/AIA Images**

Richard A [Schwartz](#), Gabriele Torre, Michele Piana  
ApJL, 2014  
<http://arxiv.org/pdf/1407.7343v1.pdf>

### **8-10 July**

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

Eduardo [Sanchez-Diaz](#), [Alexis P. Rouillard](#), [Jackie A. Davies](#), [Benoit Lavraud](#), [Rui F. Pinto](#), [Emilia Kilpua](#)  
ApJ 2017  
<https://arxiv.org/ftp/arxiv/papers/1711/1711.02486.pdf>

**9 July** - A filament eruption in the northern central hemisphere began near 14h UTC and was associated with a faint full halo CME.

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

### **Modelling the magnetic vectors of ICMEs at different heliocentric distances with INFROS**

Ranadeep [Sarkar](#), [Nandita Srivastava](#), [Nat Gopalswamy](#), [Emilia Kilpua](#)  
ApLS 2024  
<https://arxiv.org/pdf/2406.09247>

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

Tinatín [Baratashvili](#), [Benjamin Grison](#), [Brigitte Schmieder](#), [Pascal Demoulin](#), [Stefaan Poedts](#)  
A&A 2024  
<https://arxiv.org/pdf/2405.17988>

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

Bin [Zhuang](#)<sup>1</sup>, Noé [Lugaz](#)<sup>1</sup>, Nada [Al-Haddad](#)<sup>1</sup>, Réka M. [Winslow](#)<sup>1</sup>, Camilla [Scolini](#)<sup>1</sup>, Charles J. [Farrugia](#)<sup>1</sup>, and Antoinette B. [Galvin](#)<sup>1</sup>  
2023 ApJ 952 7  
<https://iopscience.iop.org/article/10.3847/1538-4357/acd847/pdf>  
<https://arxiv.org/pdf/2305.14339.pdf>

### **Automated detection of coronal MASS ejecta origiNs for space weather AppliCations (ALMANAC)**

[Thomas Williams](#), [Huw Morgan](#)  
Space Weather 2022  
<https://arxiv.org/pdf/2211.04405.pdf>

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

Sanchita [Pal](#), [Dibyendu Nandy](#), [Emilia K J Kilpua](#)  
A&A 2022  
<https://arxiv.org/pdf/2203.05231.pdf>

### **The effect of stream interaction regions on ICME structures observed in longitudinal conjunction**

Reka M. [Winslow](#), [Camilla Scolini](#), [Noé Lugaz](#), [Antoinette B. Galvin](#)  
ApJ **2021**  
<https://arxiv.org/pdf/2105.10602.pdf>

**Uncovering Erosion Effects on Magnetic Flux Rope Twist**  
Sanchita [Pal](#), [Emilia Kilpua](#), [Simon Good](#), [Jens Pomoell](#), [Daniel J. Price](#)  
A&A **2021**  
<https://arxiv.org/pdf/2104.03569.pdf>

**Synoptic solar observations of the Solar Flare Telescope focusing on space weather**  
[Yoichiro Hanaoka](#), [Takashi Sakurai](#), [Ken'ichi Otsuji](#), [Isao Suzuki](#), [Satoshi Morita](#)  
Journal of Space Weather and Space Climate **2020**  
<https://arxiv.org/pdf/2007.14054.pdf>

**Properties and magnetic origins of solar S-bursts**  
Brendan P. [Clarke](#), [Diana E. Morosan](#), [Peter T. Gallagher](#), [Vladimir V. Dorovskyy](#), [Alexander A. Konovalenko](#), [Eoin P. Carley](#)  
A&A **2019**  
<https://arxiv.org/pdf/1901.07424.pdf>

**Characteristics of type III radio bursts and solar S bursts**  
D. E. [Morosan](#), [P. T. Gallagher](#)  
Planetary Radio Emissions VIII, Austrian Academy of Sciences Press, Vienna, 357-368, **2017**  
<https://arxiv.org/pdf/1802.10460.pdf>

**Coronal mass ejections and their sheath regions in interplanetary space** **Review**  
Emilia [Kilpua](#), Hannu E. J. Koskinen & Tuija I. Pulkkinen  
Living Reviews in Solar Physics December **2017**, 14:5 **File**  
<https://link.springer.com/content/pdf/10.1007%2Fs41116-017-0009-6.pdf>

**Forward modeling of coronal mass ejection flux ropes in the inner heliosphere with 3DCORE**  
Christian [Möstl](#), [Tanja Amerstorfer](#), [Erika Palmerio](#), [Alexey Isavnin](#), [Charles J. Farrugia](#), [Chris Lowder](#), [Reka M. Winslow](#), [Julia Donnerer](#), [Emilia K. J. Kilpua](#), [Peter D. Boakes](#)  
Space Weather **2017**  
<https://arxiv.org/ftp/arxiv/papers/1710/1710.00587.pdf>

**The Association of a J-burst with a Solar Jet**  
D. E. [Morosan](#), P. T. Gallagher, R. A. Fallows, [H. Reid](#), [G. Mann](#), [M. M. Bisi](#), [J. Magdalenic](#), .....  
A&A **2017**  
<https://arxiv.org/pdf/1707.03428.pdf>

**LOFAR tied-array imaging and spectroscopy of solar S bursts**  
D. E. [Morosan](#), P. T. Gallagher, P. Zucca, A. O'Flannagain, R. Fallows, H. Reid, J. Magdalenic, G. Mann, M. M. Bisi, A. Kerdraon, A. A. Konovalenko, A. L. MacKinnon, H. O. Rucker, B. Thide, C. Vocks, A. Alexov, J. Anderson, A. Asgekar, I. M. Avruch, M. J. Bentum, G. Bernardi, A. Bonafede, F. Breitling, J. W. Broderick, W. N. Brouw, H. R. Butcher, B. Ciardi, E. de Geus, J. Eisloffel, H. Falcke, W. Frieswijk, M. A. Garrett, J. Griessmeier, A. W. Gunst, J. W. T. Hessels, M. Hoeft, A. Karastergiou, V. I. Kondratiev, G. Kuper, J. van Leeuwen, D. McKay-Bukowski, J. P. McKean, H. Munk, E. Orru, H. Paas, R. Pizzo, A. G. Polatidis, A. M. M. Scaife, J. Sluman, C. Tasse, M. C. Toribio, R. Vermeulen, P. Zarka  
A&A **2015**  
<http://arxiv.org/pdf/1507.07496v1.pdf>

**9-10 July** – **форбуш и затем геомагнитная буря, Dst~-53 нТл**

## **A Semi-empirical Approach to the Dynamic Coupling of CMEs and Solar Wind**

P. **Romero-Corona**<sup>1,2,3</sup>, J. J. González-Avilés<sup>1,2,3</sup>, and P. Riley<sup>4</sup>

2022 ApJ 937 24

<https://iopscience.iop.org/article/10.3847/1538-4357/ac8b03/pdf>

## **Forward modeling of coronal mass ejection flux ropes in the inner heliosphere with 3DCORE**

Christian **Möstl**, [Tanja Amerstorfer](#), [Erika Palmerio](#), [Alexey Isavnin](#), [Charles J. Farrugia](#), [Chris Lowder](#), [Reka M. Winslow](#), [Julia Donnerer](#), [Emilia K. J. Kilpua](#), [Peter D. Boakes](#)

Space Weather 2017

<https://arxiv.org/ftp/arxiv/papers/1710/1710.00587.pdf>

**9-13 July**

## **Comparison between the magnetic properties of magnetic clouds and those of associated coronal flux ropes**

Sanchita **Pal**

VarSITI Newsletter Vol. 21 p.11-13, 2019

[http://newserver.stil.bas.bg/varsiti/newsL/VarSITI\\_Newsletter\\_Vol21.pdf](http://newserver.stil.bas.bg/varsiti/newsL/VarSITI_Newsletter_Vol21.pdf)

**11-14 July**

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

Bin **Zhuang**<sup>1</sup>, Noé Lugaz<sup>1</sup>, Nada Al-Haddad<sup>1</sup>, Réka M. Winslow<sup>1</sup>, Camilla Scolini<sup>1</sup>, Charles J. Farrugia<sup>1</sup>, and Antoinette B. Galvin<sup>1</sup>

2023 ApJ 952 7

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

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

## **Heliospheric Evolution of Magnetic Clouds**

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

ApJ 2019

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

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

**12 July**

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

**12-14 July**

## **Statistical Plasma Properties of the Planar and Nonplanar ICME Magnetic Clouds during Solar Cycles 23 and 24**

Zubair I. **Shaikh**<sup>1</sup> and Anil N. Raghav<sup>2</sup>

2022 ApJ 938 146

<https://iopscience.iop.org/article/10.3847/1538-4357/ac8f2b/pdf>

## **The effect of stream interaction regions on ICME structures observed in longitudinal conjunction**

Reka M. **Winslow**, [Camilla Scolini](#), [Noé Lugaz](#), [Antoinette B. Galvin](#)

ApJ 2021

<https://arxiv.org/pdf/2105.10602.pdf>

**13 July**

## **Solar Eruptions in Nested Magnetic Flux Systems**

Judith T. **Karpen**<sup>1</sup>, Pankaj Kumar<sup>1,2</sup>, Peter F. Wyper<sup>3</sup>, C. Richard DeVore<sup>1</sup>, and Spiro K. Antiochos<sup>4</sup>  
2024 ApJ 966 27  
<https://iopscience.iop.org/article/10.3847/1538-4357/ad2eaa/pdf>

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

**Liu**, Wei; Berger, Thomas E.; and Low, B. C.

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

[http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS\\_Liu\\_Berger\\_Low\\_funnel-prom.pdf](http://sun.stanford.edu/~weiliu/research/publications/2013/2014IAUS_Liu_Berger_Low_funnel-prom.pdf)

**13-15 July** – **Сначала фобуш, а потом А geomagnetic storm is in progress. Dst~-82 нТл. The cause of the disturbance is a CME that swept past Earth on July 13th.**

### **Uncovering Erosion Effects on Magnetic Flux Rope Twist**

Sanchita **Pal**, [Emilia Kilpua](#), [Simon Good](#), [Jens Pomoell](#), [Daniel J. Price](#)

A&A 2021

<https://arxiv.org/pdf/2104.03569.pdf>

### **Coronal Magnetic Structure of Earthbound CMEs and In situ Comparison**

Erika **Palmerio**, [Emilia K. J. Kilpua](#), [Christian Möstl](#), [Volker Bothmer](#), [Alexander W. James](#), [Lucie M. Green](#), [Alexey Isavnin](#), [Jackie A. Davies](#), [Richard A. Harrison](#)

Space Weather 2018

<https://arxiv.org/pdf/1803.04769.pdf> File

**14 July**

### **Magnetism and the Invisible Man: The mysteries of coronal cavities**

**Review**

Sarah **Gibson**

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

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

**15 July** - a long duration C3 event peaking near 03:40 UT, Region 11791 [S14E22], CME

### **Filament Eruption and Its Reformation Caused by Emerging Magnetic Flux**

Bo **Yang**, [Huadong Chen](#)

ApJ 2019

<https://arxiv.org/pdf/1903.01235.pdf>

### **The chromosphere above a $\delta$ -sunspot in the presence of fan-shaped jets**

Carolina **Robustini**, [Jorrit Leenaarts](#), [Jaime de la Cruz Rodríguez](#)

A&A 2017

<https://arxiv.org/pdf/1709.03864.pdf>

**15-17 Jul**

### **Statistical Plasma Properties of the Planar and Nonplanar ICME Magnetic Clouds during Solar Cycles 23 and 24**

Zubair I. **Shaikh**<sup>1</sup> and Anil N. Raghav<sup>2</sup>

2022 ApJ 938 146

<https://iopscience.iop.org/article/10.3847/1538-4357/ac8f2b/pdf>

**17 July**

### **Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and Online Catalog**

Patrick I. **McCauley**, Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves

Solar Phys. 2015

<http://arxiv.org/pdf/1505.02090v1.pdf>

**18 July**

**A statistical study of decaying kink oscillations detected using SDO/AIA**

C. R. **Goddard**, G. Nisticò, V. M. Nakariakov, I. V. Zimovets

A&A 2015

<http://arxiv.org/pdf/1511.03558v1.pdf>

**19 July**

**Evidence for two-loop interaction from IRIS and SDO observations of penumbral brightenings**

C. E. **Alissandrakis**, A. Koukras, S. Patsourakos, A. Nindos

A&A 2017

<https://arxiv.org/pdf/1704.07344.pdf>

**Inference of the chromospheric magnetic field orientation in the Ca II 8542 Å line fibrils**

A. Asensio **Ramos** (1,2), J. de la Cruz Rodríguez (3), M. J. Martínez González (1,2), H. Socas-Navarro

A&A 2017

<https://arxiv.org/pdf/1612.06088v1.pdf>

**20 July**

**X-ray and EUV Observations of Simultaneous Short and Long Period Oscillations in Hot Coronal Arcade Loops**

Pankaj **Kumar**, Valery M. Nakariakov, Kyung-Suk Cho

ApJ 2015

<http://arxiv.org/pdf/1502.07117v1.pdf>

**21 July**

**Simulations of Solar Jets Confined by Coronal Loops**

P. F. **Wyper**, C. R. DeVore

ApJ 2015

<http://arxiv.org/pdf/1509.07901v1.pdf>

**Homologous Helical Jets: Observations by IRIS, SDO and Hinode and Magnetic Modeling with Data-Driven Simulations**

Mark C. M. **Cheung**, B. De Pontieu, [T. D. Tarbell](#), [Y. Fu](#), [H. Tian](#), [P. Testa](#), [K. K. Reeves](#), [J. Martínez-Sykora](#), [P. Boerner](#), [J. P. Wuelser](#), [J. Lemen](#), [A. M. Title](#), [N. Hurlburt](#), [L. Kleint](#), [C. Kankelborg](#), [S. Jaeggli](#), [L. Golub](#), [S. McKillop](#), [S. Saar](#), [M. Carlsson](#), [V. Hansteen](#)

ApJ, 2015

<http://arxiv.org/pdf/1501.01593v1.pdf>

**22 July**

**Diagnostic potential of the Ca II 8542Å line for solar filaments**

C. J. Díaz **Baso**, [M. J. Martínez González](#), [A. Asensio Ramos](#), [J. de la Cruz Rodríguez](#)

A&A 2019

<https://arxiv.org/pdf/1902.06574.pdf>

**Magnetic field variations associated with umbral flashes and penumbral waves**

Jayant **Joshi**, [Jaime de la Cruz Rodríguez](#)

A&A 2018

<https://arxiv.org/pdf/1803.01737.pdf>

**Inference of the chromospheric magnetic field orientation in the Ca II 8542 Å line fibrils**

A. Asensio **Ramos** (1,2), J. de la Cruz Rodríguez (3), M. J. Martínez González (1,2), H. Socas-Navarro

A&A 2017

<https://arxiv.org/pdf/1612.06088v1.pdf>

**24-25 July**

### **A Small-scale Oscillatory Reconnection and the Associated Formation and Disappearance of a Solar Flux Rope**

Zhike **Xue**<sup>1,2,3</sup>, Xiaoli Yan<sup>1,3</sup>, Chunlan Jin<sup>2</sup>, Liheng Yang<sup>1,3</sup>, Jincheng Wang<sup>1,3</sup>, Qiaoling Li<sup>1,3,4</sup>, and Li Zhao

2019 ApJL 874 L27

[sci-hub.se/10.3847/2041-8213/ab1135](http://sci-hub.se/10.3847/2041-8213/ab1135)

**25 July**

### **Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars**

Johan L. Freiherr **von Forstner**, Jingnan Guo, Robert F. Wimmer-Schweingruber, Donald M. Hassler, Manuela Temmer, Mateja Dumbović, Lan K. Jian, Jan K. Appel, Jaša Čalogović, Bent Ehresmann, Bernd Heber, Henning Lohf, Arik Posner, Christian T. Steigies, Bojan Vršnak, Cary J. Zeitlin

JGR 2017

<https://arxiv.org/pdf/1712.07301.pdf>

**26 July**

### **<sup>3</sup>He-Rich Solar Energetic Particle Events with No Measurable <sup>4</sup>He Intensity Increases**

George C. **Ho**, Glenn M. Mason, Robert C. Allen

Solar Physics February 2019, 294:33

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1420-z.pdf>

[sci-hub.tw/10.1007/s11207-019-1420-z](http://sci-hub.tw/10.1007/s11207-019-1420-z)

### **Automated detection of coronal mass ejections in three-dimensions using multi-viewpoint observations**

J. **Hutton** and H. Morgan

A&A 599, A68 (2017)

<http://www.aanda.org/articles/aa/pdf/2017/03/aa29516-16.pdf>

**29 July**

### **A three-dimensional view of the thermal structure in a super-penumbral canopy**

C. **Beck**, D. Prasad Choudhary, R. Rezaei

ApJ, 2014

<http://arxiv.org/pdf/1405.1473v1.pdf>

**30 July**

### **<sup>3</sup>He-Rich Solar Energetic Particle Events with No Measurable <sup>4</sup>He Intensity Increases**

George C. **Ho**, Glenn M. Mason, Robert C. Allen

Solar Physics February 2019, 294:33

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1420-z.pdf>

[sci-hub.tw/10.1007/s11207-019-1420-z](http://sci-hub.tw/10.1007/s11207-019-1420-z)

**1 Aug**

### **Investigation of Umbral Dots with the New Vacuum Solar Telescope**

Kaifan **Ji**, Xia Jiang, Song Feng, Yunfei Yang, Hui Deng, Feng Wang

Solar Phys. 2015

<http://arxiv.org/pdf/1509.00312v3.pdf>

### **Investigation of Umbral Dots with the New Vacuum Solar Telescope**

Ji **Kaifan**, Jiang Xia, Feng Song, Yang Yunfei, Deng Hui, Wang Feng

Solar Phys. 2015



<http://arxiv.org/pdf/1509.00312v1.pdf>

**2 Aug**

**Initiation and Eruption of a Two-turn Helical Quiescent Filament on 2013 August 2**

Yudi **Ou**<sup>1,2</sup>, Yingna Su<sup>1,2</sup>, Jialin Chen<sup>2,3</sup>, Yanjie Liu<sup>1,2</sup>, Jinhua Shen<sup>4</sup>, and Haisheng Ji<sup>1,2</sup>

2024 ApJ 966 6

<https://iopscience.iop.org/article/10.3847/1538-4357/ad34b4/pdf>

**3 Aug**

**Magnetic Coupling of the Solar Hemispheres During the Solar Cycle**

[V. N. Obridko](#), [V. G. Fainshtein](#), [Y. S. Zagainova](#) & [G. V. Rudenko](#)

[Solar Physics](#) volume 295, Article number: 149 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01716-x.pdf>

**Magnetic Properties and Flow Angle of the Inverse Evershed Flow at Its Downflow Points**

C. [Beck](#), [D.P. Choudhary](#)

ApJ 2019

<https://arxiv.org/pdf/1902.04660.pdf>

**Thermodynamic Properties of the Inverse Evershed Flow at Its Downflow Points**

D. P. [Choudhary](#)<sup>1</sup> and C. Beck

2018 ApJ 859 139

<http://iopscience.iop.org/article/10.3847/1538-4357/aabf36/pdf>

<https://arxiv.org/pdf/1804.07326.pdf>

**4 Aug**

**What causes the high apparent speeds in chromospheric and transition region spicules on the Sun?**

Bart [De Pontieu](#), [Juan Martinez-Sykora](#), [Georgios Chintzoglou](#)

ApJL 2017

<https://arxiv.org/pdf/1710.06803.pdf>

**4-5 Aug** – **форбуш и затем** геомагнитная буря **Dst~-45 нТл от корональной дыры**

**6-7 Aug** - a flurry of erupting magnetic EN and SW filaments

**6-12 Aug**

**A New Space Weather Tool for Identifying Eruptive Active Regions**

P. [Pagano](#), [D. H. Mackay](#), [S. L. Yardley](#)

ApJ 2019

<https://arxiv.org/pdf/1910.04226.pdf>

**7 Aug**

**Multi-wavelength high-resolution observations of a small-scale emerging magnetic flux event and the chromospheric and coronal response**

Santiago Vargas [Dominguez](#), Alexander Kosovichev, Vasyl Yurchyshyn

2014

<http://arxiv.org/pdf/1405.3550v1.pdf>

**8 Aug** - erupting magnetic SW filament

**LOFAR observations of the quiet solar corona**

C. [Vocks](#), [G. Mann](#), [F. Breitling](#), [M. M. Bisi](#), [B. Dabrowski](#), [R. Fallows](#), [P. T. Gallagher](#), [A. Krankowski](#), [J. Magdalenic](#), [C. Marque](#), [D. Morosan](#), [H. Rucker](#)

A&A 2018

<https://arxiv.org/pdf/1803.00453.pdf>

**9 Aug**

### **Solar Filaments Detection using Active Contours Without Edges**

Sanmoy **Bandyopadhyay**, [Vaibhav Pant](#)

URSI\_RCRS 2024

<https://arxiv.org/pdf/2412.20749>

**10 Aug**

### **Using Forbush decreases to derive the transit time of ICMEs propagating from 1 AU to Mars**

Johan L. Freiherr **von Forstner**, [Jingnan Guo](#), [Robert F. Wimmer-Schweingruber](#), [Donald M. Hassler](#), [Manuela Temmer](#), [Mateja Dumbović](#), [Lan K. Jian](#), [Jan K. Appel](#), [Jaša Čalogović](#), [Bent Ehresmann](#), [Bernd Heber](#), [Henning Lohf](#), [Arik Posner](#), [Christian T. Steigies](#), [Bojan Vršnak](#), [Cary J. Zeitlin](#)

JGR 2017

<https://arxiv.org/pdf/1712.07301.pdf>

**10-12 Aug**

### **Structure, Stability, and Evolution of Magnetic Flux Ropes from the Perspective of Magnetic Twist**

Rui **Liu**<sup>1</sup>, Bernhard Kliem<sup>2</sup>, Viacheslav S. Titov<sup>3</sup>, Jun Chen<sup>1</sup>, Yuming Wang<sup>1</sup>, Haimin Wang<sup>4,5</sup>, Chang Liu<sup>4,5</sup>, Yan Xu<sup>4,5</sup>, & Thomas Wiegelmann

HMI Science Nuggets #49 April 2016

<http://hmi.stanford.edu/hminuggets/?p=1397>

### **Structure, Stability, and Evolution of Magnetic Flux Ropes from the Perspective of Magnetic Twist**

Rui **Liu**, Bernhard Kliem, Viacheslav S. Titov, [Jun Chen](#), [Yuming Wang](#), [Haimin Wang](#), [Chang Liu](#), [Yan Xu](#), [Thomas Wiegelmann](#)

ApJ 2015

<http://arxiv.org/pdf/1512.02338v1.pdf>

**11 Aug** - C5+ flares: C6.7 at 21:31 and C8.4 at 21:58 UTC.

### **High Resolution Observations of Solar Flares**

Haimin **Wang**

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

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

**Review**

[Rui Liu](#)

Research in Astron. Astrophys (RAA) 2020

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

### **Signatures of Magnetic Flux Ropes in the Low Solar Atmosphere Observed in High Resolution**

**Review**

Haimin **Wang** and Chang Liu

Front. Astron. Space Sci., 04 April 2019

[sci-hub.se/10.3389/fspas.2019.00018](https://sci-hub.se/10.3389/fspas.2019.00018)

<https://www.frontiersin.org/articles/10.3389/fspas.2019.00018/full>

### **Witnessing magnetic twist with high-resolution observation from the 1.6-m New Solar Telescope**

Haimin **Wang**, Wenda Cao, Chang Liu, Yan Xu, Rui Liu, Zhicheng Zeng, Jongchul Chae and Haisheng Ji  
Nature Communications, 6, 7008, **2015**  
<http://www.nature.com/ncomms/2015/150428/ncomms8008/pdf/ncomms8008.pdf>

**12 Aug**

**Investigating pre-eruptive magnetic properties at the footprints of erupting magnetic flux ropes**

[Wensi Wang](#), [Jiong Qiu](#), [Rui Liu](#), [Chunming Zhu](#), [Kai E Yang](#), [Qiang Hu](#), [Yuming Wang](#)

ApJ **2022**

<https://arxiv.org/pdf/2211.15909.pdf>

**Properties and Energetics of Magnetic Reconnection: I. Evolution of Flare Ribbons**

[Jiong Qiu](#), [Jianxia Cheng](#)

Solar Phys. **2022**

<https://arxiv.org/pdf/2205.03004.pdf>

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

[Jiong Qiu](#)

ApJ **2021**

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

**13 Aug**

**Observations and modeling of the onset of fast reconnection in the solar transition region**

[L.-J. Guo](#), [B. De Pontieu](#), [Y.-M. Huang](#), [H. Peter](#), [A. Bhattacharjee](#)

ApJ **2020**

<https://arxiv.org/pdf/2009.11475.pdf>

**14 Aug**

**Difference of source regions between fast and slow coronal mass ejections**

B. [Filippov](#)

PASAustralia **2019**

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

**PRE-ERUPTION OSCILLATIONS IN THIN AND LONG FEATURES IN A QUIESCENT FILAMENT**

Anand D. [Joshi](#)<sup>1,2</sup>, Yoichiro Hanaoka<sup>1</sup>, Yoshinori Suematsu<sup>1</sup>, Satoshi Morita<sup>1</sup>, Vasyl Yurchyshyn<sup>2,3</sup>, and Kyung-Suk Cho

**2016** ApJ 833 243

<http://sci-hub.cc/doi/10.3847/1538-4357/833/2/243>

**15 Aug**

**High Resolution Observations of Solar Flares**

Haimin **Wang**

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

**Fine structure of flare ribbons and evolution of electric currents**

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

**2014**

<http://arxiv.org/pdf/1404.5104v1.pdf>

**16 Aug**

## Difference of source regions between fast and slow coronal mass ejections

B. [Filippov](#)

PASAustralia 2019

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

16-18 Aug – быстрый солнечный ветер ranged between 552 and 752 km/s from a large CH579, а геомагнитное возмущение слабое (из-за слабого поля).

17 Aug - ~01 UT: серьёзная EW эрупция волокна, large возмущения, CME  
- AR1818 (S07W30 ) erupted at 1824 UT, producing a LDE M3/2B-class flare.  
Выброс 304 А, корональная волна, An asymmetric full halo CME; очень слабые протоны при слабых микроволнах.

## Sunspot shearing and sudden retraction motion associated with the 2013 August 17 M3.3 Flare

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

ApJ 2022

<https://arxiv.org/pdf/2206.09156.pdf>

## He I 10830Å Dimming During Solar Flares, I: The Crucial Role of Non-Thermal Collisional Ionisations

Graham S. [Kerr](#), [Yan Xu](#), [Joel C. Allred](#), [Vanessa Polito](#), [Viacheslav M. Sadykov](#), [Nengyi Huang](#), [Haimin Wang](#)

ApJ 2021

<https://arxiv.org/pdf/2103.16686.pdf>

## High Resolution Observations of Solar Flares

Haimin [Wang](#)

Fleishman's Solar Physics Webinar 18-Sep-2020

<https://youtu.be/GZWctGWzvTY>

## Comparison of Enhanced Absorption in He I 10830 Å in Observations and Modeling During the Early Phase of a Solar Flare

[Nengyi Huang](#), [Viacheslav M. Sadykov](#), [Yan Xu](#), [Ju Jing](#), [Haimin Wang](#)

ApJ 2020

## Development and Parameters of a Non-Self-Similar CME Caused by Eruption of a Quiescent Prominence

I.V. [Kuzmenko](#) (1), [V.V. Grechnev](#)

Solar Phys. 2017

<https://arxiv.org/pdf/1709.01226.pdf> File

## On Flare and CME Predictability Based on Sunspot Group Evolution

M. B. [Korsos](#),<sup>1,2</sup> and M. S. Ruderman<sup>2</sup>

Ground-based Solar Observations in the Space Instrumentation Era

ASP Conference Series, Vol. 504 p. 43, 2016

<http://aspbooks.org/publications/504/043.pdf>

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

Markus J. [Aschwanden](#)

ApJ 2016

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

[http://www.lmsal.com/~aschwand/eprints/2016\\_global4.pdf](http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf)

## Ultra-narrow Negative Flare Front Observed in Helium-10830~Å using the 1.6 m New Solar Telescope

Yan **Xu**, Wenda Cao, Mingde Ding, Lucia Kleint, Jiangtao Su, Chang Liu, Haisheng Ji, Jongchul Chae, Ju Jing, Kyuhyoun Cho, Kyungsuk Cho, Dale Gary, Haimin Wang

2016

<http://arxiv.org/pdf/1601.04729v1.pdf>

**17-20 Aug**

## Filament Activation in Response to Magnetic Flux Emergence and Cancellation in Filament Channels

Ting **Li**, Jun Zhang, Haisheng Ji

Solar Phys. 2015

<http://arxiv.org/pdf/1504.01109v1.pdf>

**18 Aug**

## Predicting the Evolution of Photospheric Magnetic Field in Solar Active Regions Using Deep Learning

[Liang Bai](#), [Yi Bi](#), [Bo Yang](#), [Jun-Chao Hong](#), [Zhe Xu](#), [Zhen-Hong Shang](#), [Hui Liu](#), [Hai-Sheng Ji](#), [Kai-Fan Ji](#)

Research in Astron. Astrophys. (RAA) 2020

<https://arxiv.org/pdf/2012.03584.pdf>

## Spectral Structures of Type II Solar Radio Bursts and Solar Energetic Particles

Kazumasa [Iwai](#), [Seiji Yashiro](#), [Nariaki V. Nitta](#), [Yuki Kubo](#)

ApJ 2019

<https://arxiv.org/ftp/arxiv/papers/1911/1911.05897.pdf>

**19 Aug SEP**

## Evidence of a complex structure within the 2013 August 19 coronal mass ejection Radial and longitudinal evolution in the inner heliosphere★

L. [Rodríguez-García](#)<sup>1</sup>, T. Nieves-Chinchilla<sup>2</sup>, R. Gómez-Herrero<sup>1</sup>, I. Zouganelis<sup>3</sup>, A. Vourlidas<sup>4</sup>, L. A. Balmaceda<sup>2,5</sup>, M. Dumbović<sup>6</sup>, L. K. Jian<sup>2</sup>, L. Mays<sup>2</sup>, F. Carcaboso<sup>1,2,7</sup>, L. F. G. dos Santos<sup>8</sup> and J. Rodríguez-Pacheco<sup>1</sup>

A&A 662, A45 (2022)

<https://www.aanda.org/articles/aa/pdf/2022/06/aa42966-21.pdf>

<https://arxiv.org/pdf/2203.02713.pdf>

## The unusual widespread solar energetic particle event on 2013 August 19. Solar origin and particle longitudinal distribution

L. [Rodríguez-García](#), [R. Gómez-Herrero](#), [I. Zouganelis](#), [L. Balmaceda](#), [T. Nieves-Chinchilla](#), [N. Dresing](#), [M. Dumbovic](#), [N. V. Nitta](#), [F. Carcaboso](#), [L.F.G. dos Santos](#), [L. K. Jian](#), [L. Mays](#), [D. Williams](#), [J. Rodríguez-Pacheco](#)

A&A 2021

<https://arxiv.org/pdf/2107.10257.pdf>

**19-20 Aug**

## Solar energetic electron events measured by MESSENGER and Solar Orbiter. Peak intensity and energy spectrum radial dependences: statistical analysis

L. [Rodríguez-García](#), [R. Gómez-Herrero](#), [N. Dresing](#), [D. Lario](#), [I. Zouganelis](#), [L. A. Balmaceda](#), [A. Kouloumvakos](#), [A. Fedeli](#), [F. Espinosa Lara](#), [I. Cernuda](#), [G. C. Ho](#), [R. F. Wimmer-Schweingruber](#), [J. Rodríguez-Pacheco](#)

A&A 2022  
<https://arxiv.org/pdf/2211.11054.pdf>

**20 Aug** - >03 UT: эрупция большого южного волокна, 304 А; LDE C1.3; крупный CME после 08 UT; слабые мягкие протоны  
A backside full halo CME was observed early in the day.

See 19 Aug

Automated detection of coronal MASS ejecta origins for space weather Applications (ALMANAC)

[Thomas Williams](#), [Huw Morgan](#)  
Space Weather 2022  
<https://arxiv.org/pdf/2211.04405.pdf>

Initiation and Early Kinematic Evolution of Solar Eruptions

X. [Cheng](#), J. [Zhang](#), B. [Kliem](#), T. [Török](#), C. [Xing](#), Z. J. [Zhou](#), B. [Inhester](#), M. D. [Ding](#)  
ApJ 2020  
<https://arxiv.org/pdf/2004.03790.pdf>

Solar Filament Eruptions as Precursors to Flare–CME Events: Establishing the Temporal Connection

Suvadip [Sinha](#)<sup>1</sup>, Nandita Srivastava<sup>1,2</sup>, and Dibyendu Nandy<sup>1,3</sup>  
2019 ApJ 880 84  
[sci-hub.se/10.3847/1538-4357/ab2239](https://sci-hub.se/10.3847/1538-4357/ab2239)

**21 Aug**

Signatures of running penumbral waves in sunspot photospheres

Johannes [Löhner-Böttcher](#), Nazaret Bello González  
2015  
<http://arxiv.org/pdf/1503.09106v1.pdf>

**24 Aug** – заметный форбуш без бури – северное поле Bz

**27 Aug** – буря (Dst~-53)

**29 Aug** - a large magnetic filament in the sun's southern hemisphere erupted during the early hours; CME

**30 Aug** - LDE C8.3 [N11E43] event peaked at 02:46 associated with a full halo CME in STEREO.

Investigating pre-eruptive magnetic properties at the footprints of erupting magnetic flux ropes

[Wensi Wang](#), [Jiong Qiu](#), [Rui Liu](#), [Chunming Zhu](#), [Kai E Yang](#), [Qiang Hu](#), [Yuming Wang](#)  
ApJ 2022  
<https://arxiv.org/pdf/2211.15909.pdf>

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

[Jiong Qiu](#)  
ApJ 2021

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

### **Detection of supersonic downflows and associated heating events in the transition region above sunspots**

L. **Kleint**, P. Antolin, H. Tian, P. Judge, P. Testa, B. De Pontieu, J. Martínez-Sykora, K. K. Reeves, J. P. Wuelser, S. McKillop, S. Saar, M. Carlsson, P. Boerner, N. Hurlburt, J. Lemen, T. D. Tarbell, A. Title, L. Golub, V. Hansteen, S. Jaeggli, C. Kankelborg  
ApJL, **2014**

<http://arxiv.org/pdf/1406.6816v1.pdf>

**31 Aug**

### **Power-law energy distributions of small-scale impulsive events on the active Sun: Results from IRIS**

[Nived Vilangot Nhalil](#), [Chris J. Nelson](#), [Mihalis Mathioudakis](#), [J. Gerry Doyle](#), [Gavin Ramsay](#)  
MNRAS **2020**

<https://arxiv.org/pdf/2009.03123.pdf>

### **Oscillations in a sunspot with light bridges**

Ding **Yuan**, Valery M. Nakariakov, Zhenghua Huang, Bo Li, Jiangtao Su, Yihua Yan, Baolin Tan  
**2014**

<http://arxiv.org/pdf/1407.1544v1.pdf>

**2 Sept**

### **A Steady-state Supersonic Downflow in the Transition Region above a Sunspot Umbra**

Thomas **Straus**, Bernhard Fleck, Vincenzo Andretta  
A&A **2015**

<http://arxiv.org/pdf/1507.04279v1.pdf>

### **Dynamics in Sunspot Umbra as Seen in New Solar Telescope and Interface Region Imaging Spectrograph Data**

Vasyl **Yurchyshyn**, Valentyna Abramenko, Ali Kilcik  
**2014**

<http://arxiv.org/pdf/1411.0192v1.pdf>

### **High-resolution Observations of the Shock Wave Behavior for Sunspot Oscillations with the Interface Region Imaging Spectrograph**

H. **Tian**, E. DeLuca, K. K. Reeves, S. McKillop, B. De Pontieu, J. Martínez-Sykora, M. Carlsson, V. Hansteen, L. Kleint, M. Cheung, L. Golub, S. Saar, P. Testa, M. Weber, J. Lemen, A. Title, P. Boerner, N. Hurlburt, T. D. Tarbell, J. P. Wuelser, C. Kankelborg, S. Jaeggli, S. W. McIntosh  
Astrophysical Journal, 786:137, **2014**

<http://arxiv.org/pdf/1404.6291v1.pdf>

**2-3 Sep**

### **Study of the spatial association between an active region jet and a nonthermal type III radio burst\***

Sargam M. **Mulay**<sup>1,2</sup>, Rohit Sharma<sup>3</sup>, Gherardo Valori<sup>4</sup>, Alberto M. Vásquez<sup>5</sup>, Giulio Del Zanna<sup>2</sup>, Helen Mason<sup>2</sup> and Divya Oberoi<sup>6</sup>  
A&A 632, A108 (**2019**)

<https://doi.org/10.1051/0004-6361/201936369>

<https://sci-hub.st/10.1051/0004-6361/201936369>

**3 Sept** – заметный форбуш без бури – северное поле Bz

## Statistical Analysis of the Relation between Coronal Mass Ejections and Solar Energetic Particles

[Kosuke Kihara](#), [Yuwei Huang](#), [Nobuhiko Nishimura](#), [Nariaki V. Nitta](#), [Seiji Yashiro](#), [Kiyoshi Ichimoto](#), [Ayumi Asai](#)

ApJ 2020

<https://arxiv.org/pdf/2007.08062.pdf>

## Study of the spatial association between an active region jet and a nonthermal type III radio burst★

Sargam M. [Mulay](#)<sup>1,2</sup>, Rohit Sharma<sup>3</sup>, Gherardo Valori<sup>4</sup>, Alberto M. Vásquez<sup>5</sup>, Giulio Del Zanna<sup>2</sup>, Helen Mason<sup>2</sup> and Divya Oberoi<sup>6</sup>

A&A 632, A108 (2019)

<https://doi.org/10.1051/0004-6361/201936369>

<https://arxiv.org/pdf/2009.14581.pdf>

## Observing the Sun with the Murchison Widefield Array

D. [Oberoi](#) (1), R. Sharma (1), S. Bhatnagar (2), C. J. Lonsdale (3), L. D. Matthews (3), I. H. Cairns and many others

31st URSI General Assembly and Scientific Symposium, 2014

<http://arxiv.org/pdf/1403.6250v1.pdf>

## 6 September

### Ellerman bombs at high resolution III. Simultaneous observations with IRIS and SST

Gregal J. M. [Vissers](#), Luc H. M. Rouppe van der Voort, [Robert J. Rutten](#), [Mats Carlsson](#), [Bart De Pontieu](#)

ApJ 2015

<http://arxiv.org/pdf/1507.00435v1.pdf>

## 10-27 September

### Heating signatures in the disk counterparts of solar spicules in IRIS observations

L. Rouppe [van der Voort](#), B. De Pontieu, T.M.D. Pereira, M. Carlsson, V. Hansteen

ApJL, 2015

<http://arxiv.org/pdf/1412.4531v1.pdf>

### On the prevalence of small-scale twist in the solar chromosphere and transition region

B. [De Pontieu](#), L. Rouppe van der Voort, S.W. McIntosh, T.M.D. Pereira, M. Carlsson, V. Hansteen, H. Skogsrud, J. Lemen, A. Title, P. Boerner, N. Hurlburt, T.D. Tarbell, J.P. Wuelser, E.E. De Luca, L. Golub, S. McKillop, K. Reeves, S. Saar, P. Testa, H. Tian, C. Kankelborg, S. Jaeggli, L. Kleint, J. Martinez-Sykora

Science, 2014

<http://arxiv.org/pdf/1410.6862v1.pdf>

**11 Sept** - a magnetic filament snaking around the sun's southeastern limb rose up and erupted,

see 304 A.

## 13 Sep

### Evolution of the flow field in decaying active regions II. Converging flows at the periphery of naked spots

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

A&A 2022

<https://arxiv.org/pdf/2208.14272.pdf>



## **Magnetic connections across the chromosphere-corona transition region**

[Philip G. Judge](#)

ApJ 2021

<https://arxiv.org/pdf/2104.07753.pdf>

**14 September**

## **Magnetic topology of the north solar pole**

[A. Pastor Yabar](#), [M. J. Martínez González](#), [M. Collados](#)

A&A 2018

<https://arxiv.org/pdf/1804.09075.pdf>

## **Oscillation of Newly Formed Loops After Magnetic Reconnection in the Solar Chromosphere**

Shuhong [Yang](#), Yongyuan Xiang

ApJL 2016

<http://arxiv.org/pdf/1602.06370v1.pdf>

## **A solar tornado observed by EIS: Plasma diagnostics**

Peter [Levens](#), [Nicolas Labrosse](#), [Lyndsay Fletcher](#), [Brigitte Schmieder](#)

A&A 2015

<http://arxiv.org/pdf/1508.01377v1.pdf>

## **Solar Magnetized "Tornadoes": Evidence for Rotational Motion in a Tornado-like Prominence**

Yang [Su](#), Peter G?m?ry, Astrid Veronig, Manuela Temmer, Tongjiang Wang, Kamalam Vanninathan, Weiqun Gan, Youping Li

E-print, Dec 2013; ApJL

<http://arxiv.org/pdf/1312.5226v1.pdf>

**17 Sept**

## **Polarimetric Reconstruction of Coronal Mass Ejections from LASCO-C2 Observations**

O. [Floyd](#), P. Lamy

[Solar Physics](#) November 2019, 294:168

<https://link.springer.com/content/pdf/10.1007%2Fs11207-019-1553-0.pdf>

**19 Sept** - ~03 UT: небольшая эрупция, но с корональной волной

**20 September**

## **Prominence and Filament Eruptions Observed by the Solar Dynamics Observatory: Statistical Properties, Kinematics, and [Online Catalog](#)**

Patrick I. [McCauley](#), Yingna Su, Nicole Schanche, Kaitlin E. Evans, Chuan Su, Sean McKillop, Katharine K. Reeves

[Solar Phys.](#) 2015

<http://arxiv.org/pdf/1505.02090v1.pdf>

**21 Sept**

## **THREE-DIMENSIONAL GEOMETRY OF A CURRENT SHEET IN THE HIGH SOLAR CORONA: EVIDENCE FOR RECONNECTION IN THE LATE STAGE OF THE CORONAL MASS EJECTIONS**

Ryun-Young [Kwon](#)<sup>1,2</sup>, Angelos Vourlidas<sup>2</sup>, and David Webb

2016 ApJ 826 94

**21-22 September**

## **Evidence for a Magnetic Reconnection Origin of Plasma Outflows along Post-CME Rays**

Jongchul **Chae**<sup>1</sup>, Kyuhyoun Cho<sup>1</sup>, Ryun-Young Kwon<sup>2,3</sup>, and Eun-Kyung Lim  
2017 ApJ 841 49  
<http://sci-hub.cc/10.3847/1538-4357/aa6d7a>

## 22 September

### Internetwork chromospheric bright grains observed with IRIS

Juan **Martínez-Sykora**, Luc Rouppe van der Voort, Mats Carlsson et al.  
ApJ, 2015  
<http://arxiv.org/pdf/1502.03490v1.pdf>

### Statistical Evidence for the Existence of Alfvénic Turbulence in Solar Coronal Loops

Jiajia **Liu**, Scott W. McIntosh, Ineke De Moortel, James Threlfall, Christian Bethge  
2014  
<http://arxiv.org/pdf/1411.5094v1.pdf>

## 23 Sept

### Difference of source regions between fast and slow coronal mass ejections

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

## 24 Sept - A filament of magnetism curling over the sun's northeastern limb erupted around 20:30

### Detection of decayless oscillations in solar transition region loops L4

Yuhang **Gao**, Zhenyong Hou, Tom Van Doorselaere and Mingzhe Guo  
A&A Letter Volume 681, January 2024  
<https://doi.org/10.1051/0004-6361/202348702>  
<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

### The Structure of Solar Coronal Mass Ejections in the Extreme-Ultraviolet Passbands

H. Q. **Song**, **J. Zhang**, **L. P. Li**, **Y. D. Liu**, **B. Zhu**, **B. Wang**, **R. S. Zheng**, **Y. Chen**  
ApJ 2019  
<https://arxiv.org/pdf/1910.09735.pdf>

### Investigation of a confined C-class flare in an arch filament system close to a regular sunspot

Rohan Eugene **Louis**  
JGR 2019  
<https://arxiv.org/pdf/1910.05926.pdf>

### Plasma injection into a solar coronal loop

Leping **Li**, **Hardi Peter**  
A&A 2019  
<https://arxiv.org/pdf/1905.07800.pdf>

### Exploration of long-period oscillations in an H $\alpha$ prominence

M. **Zapiór**, **B. Schmieder**, **P. Mein**, **N. Mein**, **N. Labrosse**, **M. Luna**  
A&A 2019  
<https://arxiv.org/pdf/1903.00230.pdf>

### Solar Ultraviolet Bursts

Peter R. **Young**, Hui Tian, Hardi Peter, Robert J. Rutten, Chris J. Nelson, Zhenghua Huang, .....  
[Space Science Reviews](#) December 2018, 214:120

## Review

<https://link.springer.com/content/pdf/10.1007%2Fs11214-018-0551-0.pdf>

### **Magnetic Field and Plasma Diagnostics from Coordinated Prominence Observations**

B. **Schmieder**,<sup>1</sup> P. Levens,<sup>2</sup> K. Dalmasse,<sup>3</sup> N. Mein,<sup>1</sup> P. Mein,<sup>1</sup> A. Lopez-Ariste,<sup>4</sup> N. Labrosse,<sup>2</sup> and P. Heinzel<sup>5</sup>

Ground-based Solar Observations in the Space Instrumentation Era

ASP Conference Series, Vol. 504, p. 119, **2016**

<http://aspbooks.org/publications/504/119.pdf>

### **Observational Evidence of Magnetic Reconnection for Brightenings and Transition Region Arcades in IRIS observations**

Jie **Zhao**, Brigitte Schmieder, Hui Li, Etienne Pariat, Xiaoshuai Zhu, Li Feng, Michalina Grubecka  
ApJ **2017**

<https://arxiv.org/pdf/1701.08356v1.pdf>

### **Alpha Doppler shifts in a tornado in the solar corona**

B. **Schmieder**, P. Mein, N. Mein, P. J. Levens, N. Labrosse, L. Ofman

A&A **2016**

<https://arxiv.org/pdf/1612.02232v1.pdf>

### **Heating and cooling of coronal loops observed by SDO**

**Li**, L. P., Peter, H., Chen, F., and Zhang, J.

A&A, **2015**

E-print, Sept 2015

<http://ddl.escience.cn/f/sHZh>

### **Understanding the Mg II and H $\alpha$ Spectra in a Highly Dynamical Solar Prominence**

P. **Heinzel**<sup>1</sup>, B. Schmieder<sup>2</sup>, N. Mein<sup>2</sup>, and S. Gunár

**2015** ApJ 800 L13

### **Open questions on prominences from coordinated observations by IRIS, Hinode, SDO/AIA, THEMIS, and the Meudon/MSDP**

Brigitte **Schmieder**, Hui Tian, Arturo Lopez Ariste, Nicole Mein, Pierre Mein, Kevin Dalmasse, Leon Golub

A&A, **2014**

<http://arxiv.org/pdf/1407.3171v1.pdf>

## **25-26 September**

### **Detection of decayless oscillations in solar transition region loops L4**

Yuhang **Gao**, Zhenyong Hou, Tom Van Doorselaere and Mingzhe Guo

A&A Letter Volume 681, January **2024**

<https://doi.org/10.1051/0004-6361/202348702>

<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

### **Emergence of granular-sized magnetic bubbles through the solar atmosphere. III. The path to the transition region**

Ada **Ortiz**, Viggo Hansteen, Luis Ramon Bellot Rubio, [Jaime de la Cruz Rodriguez](#), [Bart De Pontieu](#), [Mats Carlsson](#), [Luc Rouppe van der Voort](#)

ApJ **2016**

<http://arxiv.org/pdf/1604.00302v1.pdf>

## **26-30 Sep**

## Three-day Forecasting of Solar Wind Speed Using SDO/AIA Extreme-ultraviolet Images by a Deep-learning Model

Jihyeon Son<sup>1</sup>, Suk-Kyung Sung<sup>2</sup>, Yong-Jae Moon<sup>1,2</sup>, Harim Lee<sup>2</sup>, and Hyun-Jin Jeong<sup>2</sup>

2023 ApJS 267 45

<https://iopscience.iop.org/article/10.3847/1538-4365/ace59a/pdf>

**27 Sept**

## On the speed and acceleration of electron beams triggering interplanetary type III radio bursts

Vratislav **Krupar** (1), [Eduard P. Kontar](#) (2), [Jan Soucek](#) (1), [Ondrej Santolik](#) (1 and 3), [Milan Maksimovic](#) (4), [Oksana Kruparova](#)

2015

<http://arxiv.org/pdf/1507.06874v1.pdf>

## Conversion from mutual helicity to self-helicity observed with IRIS

Leping **Li**, Hardi Peter, Feng Chen, Jun Zhang

A&A, 570, A93 2014

<http://arxiv.org/pdf/1410.5597v1.pdf>

**28 Sep**

## Generate Radioheliograph Image from SDO/AIA Data with Machine Learning Method

[PeiJin Zhang](#), [Chuanbing Wang](#), [Guanshan Pu](#)

Research in Astronomy and Astrophysics 2020

<https://arxiv.org/pdf/2006.13023.pdf>

**28 Sep-28 Oct**

## Characterizing extreme geomagnetic storms using Extreme Value Analysis: a discussion on the representativeness of short datasets

G. **Bernoux**, [V. Maget](#)

Space Weather **Volume 18, Issue 6** e2020SW002450 2020

<https://sci-hub.tw/10.1029/2020SW002450>

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002450>

**29 Sept** - >21 h – **серьёзная эрупция большого NW волокна, мощная на 304 Å, слабое радио, SEP протоны с медленным нарастанием до 180 pfu; a large filament eruption from near the equator and well into the northwest quadrant between the two coronal holes on the visible disk. This event was recorded as a long duration C1.1 event peaking near 23h UTC and was associated with an increase in proton fluxes and a full halo CME**

## Validation of EUHFORIA cone and spheromak Coronal Mass Ejection Models

L. **Rodriguez**, [D. Shukhobodskaja](#), [A. Niemela](#), [A. Maharana](#), [E. Samara](#), [C. Verbeke](#), [J. Magdalenic](#), [R. Vansintjan](#), [M. Mierla](#), [C. Scolini](#), [R. Sarkar](#), [E. Kilpua](#), [E. Asvestari](#), [K. Herbst](#), [G. Lapenta](#), [A.D. Chaduteau](#), [J. Pomoell](#), [S. Poedts](#)

A&A 2024

<https://arxiv.org/pdf/2405.04637>

## Multi-Scale Image Preprocessing and Feature Tracking for Remote CME Characterization

[Oleg Stepanyuk](#), [Kamen Kozarev](#), [Mohamed Nedal](#)

Journal of Space Weather and Space Climate 2022

<https://arxiv.org/pdf/2205.15088.pdf>

Ударная волна в солнечном событии, связанном с эрупцией крупного протуберанца  
Кузьменко И.В.1 , Гречнев В.В.2

Тезисы XXV всероссийская ежегодная конференция  
«Солнечная и солнечно-земная физика-2021», Пулково, 2021

<http://www.gaoran.ru/russian/solphys/2021/gao2021.pdf>

### The Correlation between Energy Spectra and Element Abundances in Solar Energetic Particles

Donald V. Reames

Solar Phys. 2020

<https://arxiv.org/ftp/arxiv/papers/2008/2008.06985.pdf>

### A Geoeffective CME Caused by the Eruption of a Quiescent Prominence on 29 September 2013

V. V. Grechnev & I. V. Kuzmenko

Solar Physics volume 295, Article number: 55 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01619-x.pdf>

CESRA #2584 June 2020 <http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2584>

### Initiation and Early Kinematic Evolution of Solar Eruptions

X. Cheng, J. Zhang, B. Kliem, T. Török, C. Xing, Z. J. Zhou, B. Inhester, M. D. Ding

ApJ 2020

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

### On the Nature of the Bright Core of Solar Coronal Mass Ejections

H. Q. Song<sup>1</sup>, J. Zhang<sup>2</sup>, X. Cheng<sup>3</sup>, L. P. Li<sup>4</sup>, Y. Z. Tang<sup>1</sup>, B. Wang<sup>1</sup>, R. S. Zheng<sup>1</sup>, and Y. Chen<sup>1</sup>

2019 ApJ 883 43

<https://iopscience.iop.org/article/10.3847/1538-4357/ab304c/pdf> File

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

Nishtha Sachdeva

Ph.D. Thesis 2019

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

### The Disappearing Solar Filament of 2013 September 29 and Its Large Associated Proton Event: Implications for Particle Acceleration at the Sun

E. W. Cliver<sup>1</sup>, S. W. Kahler<sup>2</sup>, M. Kazachenko<sup>1,3,4</sup>, and M. Shimojo<sup>5,6</sup>

2019 ApJ 877 11

[sci-hub.si/10.3847/1538-4357/ab0e03](https://arxiv.org/abs/1907.12673)

<https://iopscience.iop.org/article/10.3847/1538-4357/ab0e03/pdf>

### Difference of source regions between fast and slow coronal mass ejections

B. Filippov

PASAustralia 2019

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

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

Donald V. Reames

Solar Phys. 2019

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

### Modelling of Mg II lines in solar prominences

Peter James Levens, Nicolas Labrosse

A&A 2019

<https://arxiv.org/pdf/1902.00086.pdf>

## **The Effects of Uncertainty in Initial CME Input Parameters on Deflection, Rotation, Bz, and Arrival Time Predictions**

C. [Kay](#) , [N. Gopalswamy](#)

JGR v. 123 September **2018** Pages 7220-7240

[sci-hub.tw/10.1029/2018JA025780](http://sci-hub.tw/10.1029/2018JA025780)

## **Comparison of CME and ICME Structures Derived from Remote-Sensing and In Situ Observations**

V. [Bothmer](#), N. Mrotzek

[Solar Physics](#) November **2017**, 292:157

<https://link.springer.com/article/10.1007/s11207-017-1171-7>

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

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

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

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

## **Flux emergence event underneath a filament**

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

Proceedings of the International Astronomical Union, **2015**, Volume 305 'Polarimetry: From the Sun to Stars and Stellar Environments **2017**

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## **Direct Spatial Association of an X-Ray Flare with the Eruption of a Solar Quiescent Filament**

Gordon D. [Holman](#) & Adi Foord

*ApJ* **2015**

[http://hesperia.gsfc.nasa.gov/~kim/Holman\\_Foord\\_2015\\_quiescent\\_filament\\_flare.pdf](http://hesperia.gsfc.nasa.gov/~kim/Holman_Foord_2015_quiescent_filament_flare.pdf)

## **Direct Spatial Association of an X-Ray Flare with the Eruption of a Solar Quiescent Filament**

Gordon D. [Holman](#) & Adi Foord

*ApJ* 804 108 **2015**

[http://hesperia.gsfc.nasa.gov/~kim/Holman\\_Foord\\_2015\\_quiescent\\_filament\\_flare.pdf](http://hesperia.gsfc.nasa.gov/~kim/Holman_Foord_2015_quiescent_filament_flare.pdf)

## **RHESSI Detection of X-ray Emission from a Quiet-Sun Filament Eruption**

Gordon [Holman](#) and Adi Foord

RHESSI Science Nugget No. 250, April **2015**

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/RHESSI\\_Science\\_Nuggets](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/RHESSI_Science_Nuggets)

## **Filament Eruptions Outside of Active Regions as Sources of Large Solar Energetic Particle Events**

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

Proceedings of the 34th International Cosmic Ray Conference (ICRC2015). 30 July - 6 August, 2015.

The Hague, The Netherlands. Online at <http://pos.sissa.it/cgi-bin/reader/conf.cgi?confid=236>, id.48 **2015**

<https://pos.sissa.it/236/048/pdf>

## **Large Solar Energetic Particle Events Associated with Filament Eruptions Outside of Active Regions**

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

*ApJ* **2015**

<http://arxiv.org/ftp/arxiv/papers/1504/1504.00709.pdf>

## **Filament Activation in Response to Magnetic Flux Emergence and Cancellation in Filament Channels**

Ting **Li**, Jun Zhang, Haisheng Ji

Solar Phys. 2015

<http://arxiv.org/pdf/1504.01109v1.pdf>

## **X-ray Flare Associated with a Quiescent Filament Eruption and Coronal Mass Ejection**

**Foord**, Adi; Holman, Gordon D.

American Astronomical Society, AAS Meeting #225, #137.08, 2015

<http://adsabs.harvard.edu/abs/2015AAS...22513708F>

## **Fine-scale structures and material flows of quiescent filaments observed by New Vacuum Solar Telescope**

X.L. **Yan**, Z.K. Xue, Y.Y. Xiang, L.H. Yang

Research in Astronomy and Astrophysics 2015

<http://arxiv.org/pdf/1502.03546v1.pdf>

## **The dynamics of eruptive prominences** **Review**

Nat **Gopalswamy**

Solar Prominences, edited by J.-C. Vial & O. Engvold, Springer, in press (2014), Chapter 15, **File**

<http://arxiv.org/pdf/1407.2594v1.pdf>

## **30 Sept**

## **Predicting well-connected SEP events from observations of solar EUVs and energetic protons**

Marlon **Núñez**<sup>1\*</sup>, Teresa Nieves-Chinchilla<sup>2</sup> and Antti Pulkkinen<sup>2</sup>

J. Space Weather Space Clim. 2019, 9, A27

<https://www.swsc-journal.org/articles/swsc/pdf/2019/01/swsc180069.pdf>

## **Electron Density Reconstruction of Solar Coronal Mass Ejections Based on Genetic Algorithm: Method and Application**

Xinghua **Dai**, [Huaning Wang](#)

ApJ 2019

<https://arxiv.org/pdf/1902.06953.pdf>

## **The Abundance of Helium in the Source Plasma of Solar Energetic Particles**

Donald V. **Reames**

Solar Phys. 2017

<https://arxiv.org/ftp/arxiv/papers/1708/1708.05034.pdf>

## **Characterizing Solar Energetic Particle Event Profiles with Two-Parameter Fits**

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

Solar Physics April 2017, 292:59

<http://link.springer.com/content/pdf/10.1007%2Fs11207-017-1085-4.pdf>

## **1-3 Oct**

## **Predicting the Evolution of Photospheric Magnetic Field in Solar Active Regions Using Deep Learning**

[Liang Bai](#), [Yi Bi](#), [Bo Yang](#), [Jun-Chao Hong](#), [Zhe Xu](#), [Zhen-Hong Shang](#), [Hui Liu](#), [Hai-Sheng Ji](#), [Kai-Fan Ji](#)

Research in Astron. Astrophys. (RAA) 2020

<https://arxiv.org/pdf/2012.03584.pdf>

## Evolution of Cosmic-Ray Intensities While the Earth Was Engulfed by the Interplanetary Storm (Blob) of 1–3 October 2013

R. P. **Kane**

Solar Phys., 2014

**2 Oct** – Буря Dst ~- 48 nT и форбуш от эрупции 29-ого;  
>22 h – эрупция SE волокна

[http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

## Formation of Isolated Radio Type II Bursts at Low Frequencies

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

Solar Phys. 2021

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

## Identifying Flux Rope Signatures Using a Deep Neural Network

Luiz F. G. dos **Santos**, [Ayris Narock](#), [Teresa Nieves-Chinchilla](#), [Marlon Nuñez](#), [Michael Kirk](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2008.13294.pdf>

## Geoeffective Properties of Solar Transients and Stream Interaction Regions **Review**

E. K. J. **Kilpua**, A. Balogh, R. von Steiger, Y. D. Liu

[Space Science Reviews](#) Volume 212, **Issue 3–4**, pp 1271–1314 2017

<https://link.springer.com/content/pdf/10.1007%2Fs11214-017-0411-3.pdf>

**4 Oct**

## Explosive events on sub-arcsecond scale in IRIS observations: a case study

Zhenghua **Huang**, Maria S. Madjarska, Lidong Xia, J. G. Doyle, Klaus Galsgaard, Hui Fu

ApJ, 2014

<http://star.arm.ac.uk/preprints/2014/659.pdf>

**5 Oct, 06:50** – II тип на нашем спектре, на LEAR и STEREO, крупный CME от приличной восточной залимбовой эрупции, farside

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

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

ApJ 2018

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

**7 Oct**

## Magnetic Coupling of the Solar Hemispheres During the Solar Cycle

[V. N. Obriadko](#), [V. G. Fainshtein](#), [Y. S. Zagainova](#) & [G. V. Rudenko](#)

[Solar Physics](#) volume 295, Article number: 149 (2020)

<https://link.springer.com/content/pdf/10.1007/s11207-020-01716-x.pdf>

## Dynamic Evolution of an X-shaped Structure above a Trans-equatorial Quadrupole Solar Active Region Group

J. Q. **Sun**, X. Cheng, Y. Guo, M. D. Ding, Y. Li



ApJL, 2014

<http://arxiv.org/pdf/1405.1563v1.pdf>

**8 Oct** – на протяжении всего дня крупные эрупции NE и центрального волокон, **304 A**

An interesting chain of events started at the northeast limb near 08:30 UTC as a filament became active. The activity spread along the filament channel to near the center of the visible disk and then in a southeasterly direction along a filament channel in the southern hemisphere. A filament eruption was observed late in the day

### Investigating the Transition Region Explosive Events and Their Relationship to Network Jets

Yajie [Chen](#), [Hui Tian](#), [Zhenghua Huang](#), [Hardi Peter](#), [Tanmoy Samanta](#)

ApJ 2019

<https://arxiv.org/pdf/1901.11215.pdf>

### Space Weather Effects in the Earth's Radiation Belts

**Review**

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

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

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

### CONSTRAINING THE SOLAR CORONAL MAGNETIC FIELD STRENGTH USING SPLIT-BAND TYPE II RADIO BURST OBSERVATIONS

P. [Kishore](#)<sup>1</sup>, R. Ramesh<sup>1</sup>, K. Hariharan<sup>1</sup>, C. Kathiravan<sup>1</sup>, and N. Gopalswamy

2016 ApJ 832 59

<http://sci-hub.cc/10.3847/0004-637X/832/1/59>

**8-9 Oct** - Буря Dst ~- 65 nT и форбуш от залимбовой эрупции 5-ого (?), от небольшой центральной эрупции 6-ого (рановато?) или от КД (рановато?); The source of this unexpected disturbance is likely a faint full halo CME observed on October 6 (from 14:24 UTC in STEREO-A, after 15 UTC in LASCO). An eruption near the central meridian at close to S10 was observed at 13:45 UTC on that day.

### Characterizing extreme geomagnetic storms using Extreme Value Analysis: a discussion on the representativeness of short datasets

G. [Bernoux](#), [V. Maget](#)

Space Weather 2020 e2020SW002450

<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002450>

**9 Oct** – 01:51: M2.8 вспышка, **пересвет** на STEREO-B,  $B=17*2/300=0,11$

**9 Oct, 01:48** - вспышка M2.8 (S23E71), хороший II тип, CME

### Multiwavelength study of on-disk coronal-hole jets with IRIS and SDO observations

M. [Kolett](#)<sup>1,2,\*</sup>, C. Gontikakis<sup>2</sup>, S. Patsourakos<sup>3</sup> and K. Tsinganos<sup>1</sup>

A&A, 690, A11 (2024)

<https://doi.org/10.1051/0004-6361/202348446>

<https://www.aanda.org/articles/aa/pdf/2024/10/aa48446-23.pdf>

<https://arxiv.org/pdf/2407.02291>

### On the prevalence of small-scale twist in the solar chromosphere and transition region

B. [De Pontieu](#), L. Rouppe van der Voort, S.W. McIntosh, T.M.D. Pereira, M. Carlsson, V. Hansteen, H. Skogsrud, J. Lemen, A. Title, P. Boerner, N. Hurlburt, T.D. Tarbell, J.P. Wuelser, E.E. De Luca, L. Golub, S. McKillop, K. Reeves, S. Saar, P. Testa, H. Tian, C. Kankelborg, S. Jaeggli, L. Kleint, J. Martinez-Sykora

Science, 2014

<http://arxiv.org/pdf/1410.6862v1.pdf>

### **An Interface Region Imaging Spectrograph first view on Solar Spicules**

T. M. D. **Pereira**, B. De Pontieu, M. Carlsson, V. Hansteen, T. D. Tarbell, J. Lemen, A. Title, P. Boerner, N. Hurlburt, J. P. Wülser, J. Martínez-Sykora, L. Kleint, L. Golub, S. McKillop, K. K. Reeves, S. Saar, P. Testa, H. Tian, S. Jaeggli, C. Kankelborg  
ApJL, 2014

<http://arxiv.org/pdf/1407.6360v1.pdf>

**9-13 Oct**

### **МОРФОЛОГИЯ, ДИНАМИКА И ОСОБЕННОСТИ МАГНИТНОЙ КОНФИГУРАЦИИ АКТИВНЫХ ОБЛАСТЕЙ ПЕРЕД ВСПЫШКАМИ РЕНТГЕНОВСКОГО КЛАССА X**

**Фурсяк Ю.А.**

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

**10 Oct**

### **Limb Event Brightenings (LEBs) with fast ejection using IRIS mission Observations**

E. **Tavabi**, S. Koutchmy, L. Golub

Solar Phys. 2015

<http://arxiv.org/ftp/arxiv/papers/1507/1507.06794.pdf>

**11 Oct** – 07:31: **пересвет** от (за)лимбовой M1.5 вспышки STEREO-B,  $B=17^{\circ}2/284=0,12$

**11 Oct** - An M1.5/2F flare was recorded at 07:25 UTC, its source was at the northeast limb. A wide CME was associated with the event. Корональная волна, П(2) **На STEREO-B хорошо виды петли, уходящие на диск. Много коротких вспышек. Gamma-flare**

### **The evolution of coronal shock wave properties and their relation with solar energetic particles**

Manon **Jarry**, [Nina Dresing](#), [Alexis P. Rouillard](#), [Ilya Plotnikov](#), [Rami Vainio](#), [Christian Palmroos](#), [Athanasios Kouloumvakos](#), [Laura Vuorinen](#)

A&A 2024

### **Particle acceleration and their escape into the heliosphere in solar flares with open magnetic field**

[Mykola Gordovskyy](#), [Philippa K. Browning](#), [Kanya Kusano](#), [Satoshi Inoue](#), [Gregory E. Vekstein](#)

ApJ 2023

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

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

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

**СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА** Том 9 № 4 , 2023 С. 38–43.

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

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

Yang **Wang**<sup>1,2</sup> and Gang Qin<sup>1,2</sup>

2023 ApJ 954 81

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

## The coupling of an EUV coronal wave and ion acceleration in a Fermi-LAT behind-the-limb solar flare

Melissa **Pesce-Rollins**, [Nicola Omodei](#), [Sam Krucker](#), [Niccolò Di Lalla](#), [Wen Wang](#), [Andrea F. Battaglia](#), [Alexander Warmuth](#), [Astrid M. Veronig](#), [Luca Baldini](#)

ApJ 2022

<https://arxiv.org/pdf/2205.04760.pdf>

## Recent Results on the Fine Structure in Cosmic Radio Emission

**Book**

### *Zebra Pattern in Solar and Pulsar Radio Emission*

G.P. **Chernov**, V. Fomichev, S. Fainshtein

LAP LAMBERT Academic Publishing 2021 File

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

Melissa **Pesce-Rollins**

**Presentation** at the Fleishman Webinar Nov. 13, 2019

[http://www.ioffe.ru/LEA/SF\\_AR/files/FermiLATSolarFlares\\_webinar.pdf](http://www.ioffe.ru/LEA/SF_AR/files/FermiLATSolarFlares_webinar.pdf)

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

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

СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 5. 2019. № 3. С. 11–20

<https://naukaru.ru/ru/storage/view/39748>

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

G. A. **de Nolfo**, [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevskaia](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ 2019

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

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

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

2019

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

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

**Thesis Catalog** (2010-2017)

**Allafort**, A. J.

(2018). PhD thesis, Stanford Univ. File

[https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort\\_Thesis\\_final\\_Dec13-augmented.pdf](https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf)

## Energetic Gamma-Ray Emission from Solar Flares

Ervin **Kafexhiu**<sup>1</sup>, Carlo Romoli<sup>1,2</sup>, Andrew M. Taylor<sup>3</sup>, and Felix Aharonian

2018 ApJ 864 148

<https://sci-hub.tw/10.3847/1538-4357/aad801>

## Implications of loop-top origin for microwave, hard X-ray, and low-energy gamma-ray emissions from behind the limb flares

Vahé **Petrosian**

ApJ 2018

<https://arxiv.org/pdf/1808.07161.pdf>

## Characteristics of Sustained >100 $\gamma$ -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](http://www.astro.umd.edu/~share/publications/share_2017.pdf) File

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

Angelos [Vourlidas](#)<sup>1,4</sup>, Laura A. Balmaceda<sup>2,5,6</sup>, Guillermo Stenborg<sup>3</sup>, and Alisson Dal Lago<sup>2</sup>

2017 ApJ 838 141 [File](#)

<http://sci-hub.cc/10.3847/1538-4357/aa67f0>

### **The magnetic connectivity of coronal shocks to the visible solar surface during long-duration $\gamma$ -ray events**

Ilyya [Plotnikov](#), Alexis P. Rouillard, Gerald H. Share

A&A 2017

<https://arxiv.org/pdf/1703.07563.pdf> [File](#)

### **Fermi-LAT Observations of High-energy Behind-the-limb Solar Flares**

M. [Ackermann](#)<sup>1</sup>, A. Allafort<sup>2</sup>, L. Baldini<sup>3</sup>, G. Barbiellini<sup>4,5</sup>, D. Bastieri<sup>6,7</sup>, R. Bellazzini<sup>8</sup>, E. Bissaldi<sup>9</sup>, R. Bonino<sup>10,11</sup>, E. Bottacini<sup>2</sup>, J. Bregeon<sup>12</sup>Show full author list

2017 ApJ 835 219

<http://sci-hub.cc/doi/10.3847/1538-4357/835/2/219>

### **Unexpected spatial intensity distributions and onset timing of solar electron events observed by closely spaced STEREO spacecraft**

A. [Klassen](#)<sup>1</sup>, N. Dresing<sup>1</sup>, R. Gomez-Herrero<sup>2</sup>, B. Heber<sup>1</sup>, R. Muller-Mellin<sup>1</sup>

A&A 2016

[http://www.ieap.uni-kiel.de/et/people/klassen/Klassen\\_28734.pdf](http://www.ieap.uni-kiel.de/et/people/klassen/Klassen_28734.pdf)

### **Automatic Detection of Magnetic delta in Sunspot Groups**

Sreejith [Padinhatteeri](#), Paul A. Higgins, D. Shaun Bloomfield, Peter T. Gallagher

Solar Phys. 2015

<http://arxiv.org/pdf/1510.06413v1.pdf>

### **Fermi Large Area Telescope observations of high-energy gamma-ray emission from behind-the-limb solar flares**

Melissa [Pesce-Rollins](#), Nicola Omodei, Vahe' Petrosian, Wei Liu, Fatima Rubio da Costa, Alice Allafort, for the Fermi-LAT Collaboration

The 34th International Cosmic Ray Conference Proceedings 2015

<http://arxiv.org/pdf/1507.04303v1.pdf>

### **First detection of >100 MeV gamma rays associated with a **behind-the-limb** solar flare**

Melissa [Pesce-Rollins](#), Nicola Omodei, Vahe' Petrosian, Wei Liu, Fatima Rubio da Costa, Alice Allafort, Qingrong Chen

ApJL 2015

<http://arxiv.org/pdf/1505.03480v1.pdf> [File](#)

## **12 Oct**

### **Hard X-rays from the deep solar atmosphere: An unusual UV burst with flare properties**

[L. P. Chitta](#), [I. G. Hannah](#), [L. Fletcher](#), [H. S. Hudson](#), [P. R. Young](#), [S. Krucker](#), [H. Peter](#)

A&A Letters 2024

<https://arxiv.org/pdf/2407.06140>

### **Investigating pre-eruptive magnetic properties at the footprints of erupting magnetic flux ropes**

[Wensi Wang](#), [Jiong Qiu](#), [Rui Liu](#), [Chunming Zhu](#), [Kai E Yang](#), [Qiang Hu](#), [Yuming Wang](#)

ApJ 2022

<https://arxiv.org/pdf/2211.15909.pdf>

**Eruptions from coronal hole bright points: observations and non-potential modelling**

Maria S. [Madjarska](#), [Klaus Galsgaard](#), [Duncan H. Mackay](#), [Kostadinka Koleva](#), [Momchil Dechev](#)

A&A 2020

<https://arxiv.org/pdf/2009.04628.pdf>

**Chromospheric magnetic field: A comparison of He I 10830 Å observations with nonlinear force-free field extrapolation**

[Yusuke Kawabata](#), [Andrés Asensio Ramos](#), [Satoshi Inoue](#), [Toshifumi Shimizu](#)

ApJ 2020

<https://arxiv.org/pdf/2006.00179.pdf>

**Energy origination and triggering mechanism of a series of homologous confined flares**

Guorong [Chen](#), [Xiaoli Yan](#)

ApJ 2019

<https://arxiv.org/pdf/1910.09147.pdf>

**EUV Emission and Scattered Light Diagnostics of Equatorial Coronal Holes as Seen by Hinode/EIS**

Carolyn [Wendeln](#), [Enrico Landi](#)

ApJ 2017

<https://arxiv.org/pdf/1712.03042.pdf>

**Fine Structures and Overlying Loops of Confined Solar Flares**

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

ApL, 2014

<http://arxiv.org/pdf/1409.0471v1.pdf>

**13 Oct – 01:43 – M1.3 flare (S22E17) and eruption, faint type II, partial halo CME**

Много коротких вспышек.

07:11-07:23 – type II(1) и у нас виден

**The relationships among solar flare impulsiveness, energy release, and ribbon development**

[Cole A Tamburri](#), [Maria D Kazachenko](#), [Adam F Kowalski](#)

ApJ 2024

<https://arxiv.org/pdf/2403.02457.pdf>

**Improved AI-generated Solar Farside Magnetograms by STEREO and SDO Data Sets and Their Release**

Hyun-Jin [Jeong](#)<sup>1</sup>, Yong-Jae Moon<sup>1,2</sup>, Eunsu Park<sup>3</sup>, Harim Lee<sup>2</sup>, and Ji-Hye Baek<sup>3,4</sup>

2022 ApJS 262 50

<https://iopscience.iop.org/article/10.3847/1538-4365/ac8d66/pdf>

**On the prevalence of small-scale twist in the solar chromosphere and transition region**

B. [De Pontieu](#), L. Rouppe van der Voort, S.W. McIntosh, T.M.D. Pereira, M. Carlsson, V. Hansteen, H. Skogsrud, J. Lemen, A. Title, P. Boerner, N. Hurlburt, T.D. Tarbell, J.P. Wuelser, E.E. De Luca, L. Golub, S. McKillop, K. Reeves, S. Saar, P. Testa, H. Tian, C. Kankelborg, S. Jaeggli, L. Kleint, J. Martinez-Sykora

Science, 2014

<http://arxiv.org/pdf/1410.6862v1.pdf>

**13-16 Oct**

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

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

ApJ 2021  
<https://arxiv.org/pdf/2101.07452.pdf>

**14 Oct** – 13:15 – C8.0 вспышка (S21W01) и небольшая эрупция

### New Probabilistic Model For Episode Integrated Fluences of Protons Using Episodes From 1973-2013

Zachary D. [Robinson](#)  
Thesis (2015) 2017  
<https://arxiv.org/pdf/1711.04391.pdf>

**15 Oct** – 08:38: центральная/южная вспышка M1.8 и **довольно большая эрупция**

Много коротких вспышек. C5+ flares: C9.5 at 05:07, M1.8 at 08:38, C6.5 at 15:36, M1.3 at 23:36.

- слабая буря (**Dst ~-40 nT**) и форбуш under the influence of a high speed stream from CH590.

### The relationships among solar flare impulsiveness, energy release, and ribbon development

[Cole A Tamburri](#), [Maria D Kazachenko](#), [Adam F Kowalski](#)

ApJ 2024  
<https://arxiv.org/pdf/2403.02457.pdf>

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

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

### Characterizing extreme geomagnetic storms using Extreme Value Analysis: a discussion on the representativeness of short datasets

G. [Bernoux](#), [V. Maget](#)  
Space Weather 2020 e2020SW002450  
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2020SW002450>

### Flare-induced changes of the photospheric magnetic field in a $\delta$ -spot deduced from ground-based observations

Peter [Gömöry](#), Horst Balthasar, Christoph Kuckein, Július Koza, Astrid M. Veronig, Sergio J. González Manrique, Aleš Kučera, Pavol Schwartz, Arnold Hanslmeier

A&A 2017  
<https://arxiv.org/pdf/1704.06089.pdf>

**16 Oct** – Короткие вспышки и небольшие эрупции. 09:19-09:29 – II тип слабый

**17 Oct** – 01:51: M1.2 вспышка, **пересвет** на STEREO-A,  $A=18,5 \cdot 2/312=0,12$

**17-18 Oct**

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

Fraser T. [Watson](#), Christian Beck, Matthew J. Penn, Alexandra Tritschler...  
Solar Phys. 2015  
<http://arxiv.org/pdf/1511.07315v1.pdf>

**18-20 Oct**

## **Future High-Resolution and High-Cadence Observations for Unraveling Small-Scale Explosive Solar Features**

[Alphonse C. Sterling](#), [Ronald L. Moore](#), [Navdeep K. Panesar](#), [Tanmoy Samanta](#), [Sanjiv K. Tiwari](#), [Sabrina L. Savage](#)

Frontiers 2023

<https://arxiv.org/pdf/2302.13179.pdf>

## **Relation of coronal rain originating from coronal condensations to interchange magnetic reconnection**

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

ApJ 2020

<https://arxiv.org/pdf/2011.00709.pdf>

### **19 Oct**

## **Helical motions of fine-structure prominence threads observed by Hinode and IRIS**

Takenori J. [Okamoto](#), Wei Liu, Saku Tsuneta

ApJ 2016

<http://arxiv.org/pdf/1608.00123v1.pdf>

## **Resonant Absorption of Transverse Oscillations and Associated Heating in a Solar Prominence. I- Observational aspects**

Takenori J. [Okamoto](#), Patrick Antolin, Bart De Pontieu, [Han Uitenbroek](#), [Tom Van Doorselaere](#), [Takaaki Yokoyama](#)

ApJ 2015

<http://arxiv.org/pdf/1506.08965v1.pdf>

### **20 Oct**

## **Consecutive Narrow and Broad Quasi-periodic Fast-propagating Wave Trains Associated with a Flare**

[Xinping Zhou](#), [Yuandeng Shen](#), [Chengrui Zhou](#), [Zehao Tang](#), [Ahmed Ahmed Ibrahim](#)

ScChG 2024

<https://arxiv.org/pdf/2401.06661.pdf>

## **Statistical study of type III bursts and associated HXR emissions**

[James](#), [Tomin](#) ; [Vilmer](#), [Nicole](#)

Astronomy & Astrophysics, Volume 673, id.A57, 13 pp. 2023

<https://www.aanda.org/articles/aa/pdf/2023/05/aa45825-22.pdf>

## **Sympathetic Filament Eruptions within a Fan-spine Magnetic System**

[Chengrui Zhou](#), [Yuandeng Shen](#), [Xinping Zhou](#), [Zehao Tang](#), [Yadan Duan](#), [Song Tan](#)

ApJ 2021

<https://arxiv.org/pdf/2109.09285.pdf>

## **Magnetic Flux Cancellation as the Buildup and Trigger Mechanism for CME-Producing Eruptions in two Small Active Regions**

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

ApJ 2018

<https://arxiv.org/pdf/1807.03237.pdf>

### **20-26 Oct**

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

Dattaraj B. [Dhuri](#)<sup>1,2</sup>, Shamik Bhattacharjee<sup>1</sup>, Shravan M. Hanasoge<sup>1,2</sup>, and Sashi Kiran Mahapatra<sup>1</sup>

2022 ApJ 939 64

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

**21 Oct**

**Sounding Rocket Observations of Active Region Soft X-Ray Spectra Between 0.5 and 2.5 nm Using a Modified SDO/EVE Instrument**

Seth **Wieman**, Thomas Woods, Andrew Jones, Christopher Moore  
Solar Phys. 2016

**22 Oct** : - утро – **крупная эрупция крупного центрального-северного волокна, 304 А, CME направлен к северу; A partial CME was observed early in the day following a filament eruption in the northeast quadrant.**

**21:20 – очень импульсная M4.2 (N04W01) вспышка, выброс на запад, 304 А, волна Мортонa (см. <http://www.spaceweather.com/>), II тип? A small halo CME was associated with the M4 event in AR 11875 late in the day.**

**The diversity of spectral shapes of hydrogen Lyman lines and Mg II lines in a quiescent prominence**

P. **Schwartz** (1), [S. Gunar](#) (2), [J. Koza](#) (1), [P. Heinzel](#) (2, 3) ((1)  
A&A 2024

<https://arxiv.org/pdf/2401.09992.pdf>

**Statistical Studies on Modified Neupert Effect★**

YU Wen-hui a b c, LI You-ping a b, GAN Wei-qun a b

[Chinese Astronomy and Astrophysics Volume 45, Issue 1, 2021, Pages 82-98](#)

<https://doi.org/10.1016/j.chinastron.2021.02.006>

<https://www.sciencedirect.com/science/article/abs/pii/S0275106221000060>

<https://sci-hub.ru/10.1016/j.chinastron.2021.02.006>

**Differential Emission Measure Evolution as a Precursor of Solar Flares**

C. **Gontikakis** (1), [I. Kontogiannis](#) (2), [M.K. Georgoulis](#) (1,3), [C. Guennou](#) (4), [P. Syntelis](#) (5), [S.H. Park](#) (6), [E. Buchlin](#)

2020

<https://arxiv.org/pdf/2011.06433.pdf>

**When do solar erupting hot magnetic flux ropes form?**

[A. Nindos](#), [S. Patsourakos](#), [A. Vourlidas](#), [X. Cheng](#), [J. Zhang](#)

A&A 2020

<https://arxiv.org/pdf/2008.04380.pdf>

**Plasmoid-mediated reconnection in solar UV bursts**

H. **Peter**, [Y.-M. Huang](#), [L. P. Chitta](#), [P. R. Young](#)

A&A 2019

<https://arxiv.org/pdf/1907.04335.pdf>

**СРАВНЕНИЕ ОСОБЕННОСТЕЙ ФОРМИРОВАНИЯ  
КОРОНАЛЬНЫХ ВЫБРОСОВ МАССЫ, ИМЕЮЩИХ РАЗНУЮ  
СКОРОСТЬ В ПОЛЕ ЗРЕНИЯ КОРОНГРАФОВ LASCO**

[Загайнова Ю.С.1](#), [Файнштейн В.Г.2](#), [Мышьяков И.И.2](#)

Астрономия-2018 Том 2 Солнечно-земная физика – современное состояние и перспективы Стр. 82

<http://www.izmiran.ru/library/eaas2018/eaas-2018-2.pdf>

**Statistical analysis of UV spectra of a quiescent prominence observed by IRIS**

S. **Jejič**, [P. Schwartz](#), [P. Heinzel](#), [M. Zapiór](#), [S. Gunár](#)

A&A 2018



<https://arxiv.org/pdf/1807.05767.pdf>

**22-23 Oct**

### Solar Ultraviolet Bursts

**Review**

Peter R. **Young**, Hui Tian, Hardi Peter, Robert J. Rutten, Chris J. Nelson, Zhenghua Huang, .....

[Space Science Reviews](#) December 2018, 214:120

<https://link.springer.com/content/pdf/10.1007%2Fs11214-018-0551-0.pdf>

**22-29 Oct**

### Exhaustive study of three-time periods of solar activity due to single active regions: sunspot, flare, CME, and, geo-effective characteristics

[Shirsh Lata Soni](#), [Manohar Lal Yadav](#), [Radhe Syam Gupta](#), [Pyare Lal Verma](#)

Astrophysics and space science journal 2020

<https://arxiv.org/ftp/arxiv/papers/2012/2012.04853.pdf>

**23 Oct**

RHESSI Science Nuggets #361 Oct 2019

23 Oct 2013

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Non-radial\\_jets\\_on\\_the\\_edges\\_of\\_active\\_regions](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Non-radial_jets_on_the_edges_of_active_regions)

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

Angelos **Vourlidas**<sup>1,4</sup>, Laura A. Balmaceda<sup>2,5,6</sup>, Guillermo Stenborg<sup>3</sup>, and Alisson Dal Lago<sup>2</sup>

2017 ApJ 838 141 **File**

<http://sci-hub.cc/10.3847/1538-4357/aa67f0>

**23-24 Oct**

### Flaring together: A preferred angular separation between sympathetic flares on the Sun

[Louis-Simon Guité](#), [Antoine Strugarek](#), [Paul Charbonneau](#)

A&A 2024

<https://arxiv.org/pdf/2412.10143>

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**24-29 Oct: высокая вспышечная активность западной AR 1875, включая ряд вспышек балла X**

### Exhaustive study of three-time periods of solar activity due to single active regions: sunspot, flare, CME, and, geo-effective characteristics

[Shirsh Lata Soni](#), [Manohar Lal Yadav](#), [Radhe Syam Gupta](#), [Pyare Lal Verma](#)

Astrophysics and space science journal 2020

<https://arxiv.org/ftp/arxiv/papers/2012/2012.04853.pdf>

### The Halloween Flares and Large-Scale Correlations

Richard **Schwartz** and Hugh Hudson

RHESSI Halloween Nugget, Oct 2013

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/The\\_Halloween\\_Flares\\_and\\_Large-Scale\\_Correlations](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/The_Halloween_Flares_and_Large-Scale_Correlations)

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**24 Oct: 00:30 UT, Earth-facing sunspot AR1877 (S10E08) erupted, producing a powerful M9-class flare. A faint halo CME was observed after the M9 event in AR 11877 early in the day.**

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

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

ApJ 2019  
<https://arxiv.org/pdf/1908.08643.pdf>

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

Yumi **Bamba**, [Kanya Kusano](#)  
ApJ 2018  
<https://arxiv.org/pdf/1802.00134.pdf>

### Transient Mass Loss Analysis of Solar Observations using Stellar Methods

M. K. **Crosley**, R. A. Osten, C. Norman  
2017  
<https://arxiv.org/pdf/1707.01928.pdf>

### Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima  
ApJ 2016  
<https://arxiv.org/pdf/1611.05047v1.pdf>

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

Markus J. **Aschwanden**  
ApJ 2016  
<http://arxiv.org/pdf/1605.04952v1.pdf> File  
[http://www.lmsal.com/~aschwand/eprints/2016\\_global4.pdf](http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf)

#### 24-25 Oct

#### Observations of solar flares with IRIS and SDO

D. **Li**, D.E. Innes, Z. J. Ning  
A&A 2015  
<http://arxiv.org/pdf/1512.05147v1.pdf>

**25 Oct** – 03:11: M2.9 вспышка, **пересвет** на STEREO-B,  $B=26^2/282=0,18$   
08:03: X1.7 вспышка, **пересвет** на STEREO-B,  $B=54^2/282=0,38$   
10:16: M1.0 **пересвет**  $B=14^2/282=0,1$   $\leftarrow 16s$   $8s \rightarrow$  **10:05**  $B=11^2/282=0,078$   
15:01: X2.1 вспышка, **пересвет** на STEREO-B,  $B=90^2/282=0,64$   
17:11: M1.3 вспышка, **пересвет** на STEREO-B,  $B=9^2/282=0,06$   
19:21: M2.3 вспышка, **пересвет** на STEREO-B,  $B=19^2/282=0,13$   
21:01: M1.9 вспышка, **пересвет** на STEREO-B,  $B=23,5^2/282=0,17$

**25 Oct:** near **E-limb region AR1882** produced 3 powerful flares with strong microwaves and type II bursts - an M2.9 flare at 03:02; an impulsive X1.7 event at 08:01 associated with a relatively small CME off the east limb; **Gamma** at 15:03 an impulsive X2.1 flare. A faint asymmetric halo CME was observed after the X1.7 event at 08h while a significantly larger full halo asymmetric CME was observed after the X2.1 flare near 15h.

### 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>

### Detection of decayless oscillations in solar transition region loops L4

Yuhang **Gao**, Zhenyong Hou, Tom Van Doorselaere and Mingzhe Guo  
A&A Letter Volume 681, January 2024

<https://doi.org/10.1051/0004-6361/202348702>  
<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

### **Deep Neural Networks of Solar Flare Forecasting for Complex Active Regions**

Ming **Li**, Yanmei Cui, Yanmei Cui, and Bingxian Luo

Front. Astron. Space Sci. 10: 1177550. **2023**

doi: 10.3389/fspas.2023.1177550

<https://www.frontiersin.org/articles/10.3389/fspas.2023.1177550/pdf>

### **A type II solar radio burst without a coronal mass ejection**

[D. E. Morosan](#), [J. Pomoell](#), [A. Kumari](#), [E. K. J. Kilpua](#), [R. Vainio](#)

A&A **2023**

<https://arxiv.org/pdf/2305.11545.pdf>

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

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

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

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

### **Shock-accelerated electrons during the fast expansion of a coronal mass ejection**

[D. E. Morosan](#), [J. Pomoell](#), [A. Kumari](#), [R. Vainio](#), [E. K. J. Kilpua](#)

A&A **2022**

<https://arxiv.org/pdf/2211.06049.pdf>

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

[Минасянц Г.С.](#), [Минасянц Т.М.](#), [Томозов В.М.](#)

СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 5. **2019**. № 3. С. 11–20

<https://naukaru.ru/ru/storage/view/39748>

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

G. A. [de Nolfo](#), [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevskaaya](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ **2019**

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

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

**Thesis Catalog (2010-2017)**

[Allafort](#), A. J.

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

[https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort\\_Thesis\\_final\\_Dec13-augmented.pdf](https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf)

### **Statistical Investigation of Supersonic Downflows in the Transition Region above Sunspots**

[Tanmoy Samanta](#), [Hui Tian](#), [Debi Prasad Choudhary](#)

ApJ **2018**

<https://arxiv.org/pdf/1804.05054.pdf>

### **Characteristics of Sustained >100 $\gamma$ -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](http://www.astro.umd.edu/~share/publications/share_2017.pdf) File

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

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

ApJ Supplement Series

**2017**

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

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

Jae-Ok **Lee**<sup>1,2</sup>, Y.-J. Moon<sup>1</sup>, Jin-Yi Lee<sup>3</sup>, R.-S. Kim<sup>2</sup>, and K.-S. Cho<sup>2</sup>

2017 ApJ 838 70

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

### **Very Long-period Pulsations before the Onset of Solar Flares**

Baolin **Tan**, Zhiqiang Yu, Jing Huang, Chengming Tan, Yin Zhang

ApJ 2016

<https://arxiv.org/pdf/1610.09291v1.pdf>

### **On Understanding the Nature of Collision of Coronal Mass Ejections Observed by STEREO**

Wageesh **Mishra**, Yuming Wang, Nandita Srivastava

ApJ 2016

<http://arxiv.org/pdf/1607.07692v1.pdf> File

### **EUV Irradiance Observations from SDO/EVE as a Diagnostic of Solar Flares**

Ryan O. **Milligan**

Conference proceedings for the symposium on "Solar and Stellar Flares and their Effects on the Planets" at the IAU General Assembly in Honolulu, HI, August 2015

<http://arxiv.org/pdf/1604.07793v1.pdf>

### **Analytical solutions of continuity equation for joint collisional and Ohmic energy losses and their effects on hard X-ray emission. II. Mixed energy losses**

**Zharkova** V.V. and Dobranskis R.R.

MNRAS 2016

<http://mnras.oxfordjournals.org/content/early/2016/03/07/mnras.stw500.full.pdf?keytype=ref&ijkey=zcVKoDhBj8zNW7o>

**26 Oct** – 11:16: M1.8 вспышка, **пересвет** на STEREO-B,  $B=12*2/281=0,09$   
19:26: M3.1 вспышка, **пересвет** на STEREO-B,  $B=19*2/281=0,14$   
20:16: M1.0 **пересвет**  $B=12,5*2/281=0,09$  ←16s 8s→  $B=12,5/281=0,044$

**26 Oct:** 09:37 – M1.5 flare in **AR1882, S9~430, наш II тип**  
11:17 – M1.8/1N flare in **AR1882 (S05E58), S5~470**

### **Turbulence in Sources of Decimetric Flare Continua**

Marian **Karlický**

[Solar Physics](#) volume 298, Article number: 95 (2023)

<https://link.springer.com/content/pdf/10.1007/s11207-023-02188-5.pdf>

### **An Observational Revisit of Stationary Type IV Solar Radio Bursts**

[Maoshui Lv](#), [Yao Chen](#), [V. Vasanth](#), [Mohd Shazwan Radzi](#), [Zamri Zainal Abidin](#) & [Christian Monstein](#)

[Solar Physics](#) volume 296, Article number: 38 (2021)

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

### **When do solar erupting hot magnetic flux ropes form?**

[A. Nindos](#), [S. Patsourakos](#), [A. Vourlidas](#), [X. Cheng](#), [J. Zhang](#)

A&A 2020

<https://arxiv.org/pdf/2008.04380.pdf>

### **CMEs in the Heliosphere: III. A Statistical Analysis of the Kinematic Properties Derived from Stereoscopic Geometrical Modelling Techniques Applied to CMEs Detected in the Heliosphere from 2008 to 2014 by STEREO/HI-1**

D. [Barnes](#), [J. A. Davies](#), [R. A. Harrison](#), [J. P. Byrne](#), [C. H. Perry](#), [V. Bothmer](#), [J. P. Eastwood](#), [P. T. Gallagher](#), [E. K. J. Kilpua](#), [C. Möstl](#), [L. Rodriguez](#), [A. P. Rouillard](#), [D. Odstrcil](#)

Solar Phys. 2020

<https://arxiv.org/pdf/2006.14879.pdf>

### **The Nature and Origin of Moving Solar Radio Bursts Associated with Coronal Mass Ejections**

Diana [Morosan](#), Emilia Kilpua, Erika Palmerio, Benjamin Lynch, Jens Pomoell, Rami Vainio, Minna Palmroth, Juska Räsänen

EGU2020 Presentation #5379 File

### **Shock location and CME 3D reconstruction of a solar type II radio burst with LOFAR**

[P. Zucca](#), [D. E. Morosan](#), [A. P. Rouillard](#), [R. Fallows](#), [P. T. Gallagher](#), [J. Magdalenic](#), [K-L. Klein](#), [G. Mann](#), .....

A&A 2018

<https://arxiv.org/pdf/1804.01025.pdf> File

### **Turbulence and Heating in the Flank and Wake Regions of a Coronal Mass Ejection**

Siteng [Fan](#), [Jiansen He](#), [Limei Yan](#), [Steven Tomczyk](#), [Hui Tian](#)...

[Solar Physics](#) January 2018, 293:6

### **Automated detection of coronal mass ejections in three-dimensions using multi-viewpoint observations**

J. [Hutton](#) and H. Morgan

A&A 599, A68 (2017)

<http://www.aanda.org/articles/aa/pdf/2017/03/aa29516-16.pdf>

### **The Impact of a Filament Eruption on Nearby High-lying Cool Loops**

L. K. [Harra](#)<sup>1</sup>, S. A. Matthews<sup>1</sup>, D. M. Long<sup>1</sup>, G. A. Doschek<sup>2</sup>, and B. De Pontieu

2014 ApJ 792 93

<http://fr.arxiv.org/pdf/1409.0377v1>

**27 Oct** – 12:46: M3.5 вспышка, **пересвет** на STEREO-B,  $B=20^{\circ}2/281=0,14$

Видимо, наложились две вспышки: S09E71 SN 1884 и N06W63 1F 1875. Пересвет на 1-ой.

### **Signature of the turbulent component of solar dynamo on active region scales and its association with flaring activity**

[Valentina I. Abramenko](#)

MNRAS 2021

<https://arxiv.org/pdf/2111.04425.pdf>

**27 Oct-1 Nov**

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

Dattaraj B. [Dhuri](#)<sup>1,2</sup>, Shamik Bhattacharjee<sup>1</sup>, Shravan M. Hanasoge<sup>1,2</sup>, and Sashi Kiran Mahapatra<sup>1</sup>

2022 ApJ 939 64

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

**28 Oct** - 02:16: X1.0 **пересвет**  $A=46^{\circ}2/311=0,30 \leftarrow 16s \quad 8s \rightarrow$  **02:06**  $A=37,5^{\circ}2/311=0,241$   
04:40: M5.1 вспышка, **пересвет** на STEREO-A,  $A=32^{\circ}2/311=0,21$

14:16: M2.8 **пересвет**  $A=29*2/311=0,19$   $\leftarrow 16s$   $8s \rightarrow$  **14:05**  $A=23*2/311=0,148$   
16:16: M2.0 **пересвет**  $A=29*2/311=0,19$   $\leftarrow 16s$   $8s \rightarrow$   $A=29/311=0,093$   
**по картинке GOES**  
20:56: M1.5 вспышка, **пересвет** на STEREO-A,  $A=11,5*2/311=0,07$

**28 Oct: 02:03** – западная (N04W66) **X1.0/2N** вспышка, S15~3300, близкая к импульсной **Sustained Gamma**  
**Несколько вспышек балла M; небольшие восточные протоны ~4 pfu**

### Searching for rapid pulsations in solar flare X-ray data

[Andrew R. Inglis](#), [Laura A. Hayes](#)

ApJ 2024

<https://arxiv.org/pdf/2406.07372>

### Extreme solar events

**Review**

[Edward W. Cliver](#), [Carolus J. Schrijver](#), [Kazunari Shibata](#) & [Ilya G. Usoskin](#)

[Living Reviews in Solar Physics](#) volume 19, Article number: 2 (2022)

<https://link.springer.com/content/pdf/10.1007/s41116-022-00033-8.pdf>

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

N. [Vasantharaju](#)<sup>1,2</sup>, P. [Vemareddy](#)<sup>1</sup>, B. [Ravindra](#)<sup>1</sup>, and V. H. [Doddamani](#)<sup>3</sup>

2022 ApJ 927 86

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

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

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

ApJ 2022

<https://arxiv.org/pdf/2201.06550.pdf>

### Indications of stellar coronal mass ejections **through coronal dimmings**

Astrid M. [Veronig](#), Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson

Nature Astronomy Volume 5, p. 697-706 2021

<https://www.nature.com/articles/s41550-021-01345-9.epdf>

<https://doi.org/10.1038/s41550-021-01345-9>

<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

### Successive Coronal Mass Ejections Associated with Weak Solar Energetic Particle Events

Bin [Zhuang](#), [Noé Lugaz](#), [Tingyu Gou](#), [Liuguan Ding](#)

ApJ 2021

<https://arxiv.org/pdf/2109.02225.pdf>

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

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

ApJ 2021

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

### First Fermi-LAT Solar Flare **Catalog**

M. [Ajello](#)<sup>1</sup>, L. [Baldini](#)<sup>2</sup>, D. [Bastieri](#)<sup>3,4</sup>, R. [Bellazzini](#)<sup>5</sup>, A. [Berretta](#)<sup>6</sup>, E. [Bissaldi](#)<sup>7,8</sup>, R. D. [Blandford](#)<sup>9</sup>, R.

[Bonino](#)<sup>10,11</sup>, P. [Bruehl](#)<sup>12</sup>, S. [Buson](#)<sup>13</sup>Show full author list

2021 ApJS 252 13

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

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

**On the seismic emission in sunspots associated with Lorentz force changes accompanying major solar flares**

[Hirdesh Kumar](#), [Brajesh Kumar](#)

MNRAS 2020

<https://arxiv.org/pdf/2007.05231.pdf>

**Spectral Structures of Type II Solar Radio Bursts and Solar Energetic Particles**

Kazumasa [Iwai](#), [Seiji Yashiro](#), [Nariaki V. Nitta](#), [Yuki Kubo](#)

ApJ 2019

<https://arxiv.org/ftp/arxiv/papers/1911/1911.05897.pdf>

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

[Минасянц Г.С.](#), [Минасянц Т.М.](#), [Томозов В.М.](#)

СОЛНЕЧНО-ЗЕМНАЯ ФИЗИКА Том 5. 2019. № 3. С. 11–20

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**Pre-flare processes, flux rope activation, large-scale eruption and associated X-class flare from the active region NOAA 11875**

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

ApJ 2019

<https://arxiv.org/pdf/1908.04059.pdf>

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

G. A. [de Nolfo](#), [A. Bruno](#), [J. M. Ryan](#), [S. Dalla](#), [J. Giacalone](#), [I. G. Richardson](#), [E. R. Christian](#), [S. J. Stochaj](#), [G. A. Bazilevskaia](#), [M. Boezio](#), [M. Martucci](#), [V. V. Mikhailov](#), [R. Munini](#)

ApJ 2019

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**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](https://stacks.stanford.edu/file/druid:kp476kd8769/Allafort_Thesis_final_Dec13-augmented.pdf)

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

S. W. [Kahler](#)<sup>1</sup>, E. W. Cliver<sup>2</sup>, and M. Kazachenko<sup>3</sup>

2018 ApJ 868 81

[sci-hub.tw/10.3847/1538-4357/aae9d8](http://sci-hub.tw/10.3847/1538-4357/aae9d8)

**Onboard Automated CME Detection Algorithm for Visible Emission Line Coronagraph on ADITYA-L1**

Ritesh [Patel](#), [K Amareswari](#), [Vaibhav Pant](#), [Dipankar Banerjee](#), [Sankarasubramanian K](#), [Amit Kumar](#)

Solar Phys. 2018

<https://arxiv.org/pdf/1806.07932.pdf>

**Characteristics of Sustained >100  $\gamma$ -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](http://www.astro.umd.edu/~share/publications/share_2017.pdf) File

**Quasi-Periodic Pulsations during the Impulsive and Decay phases of an X-class Flare**

Laura A. [Hayes](#), Peter T. Gallagher, Brian R. Dennis, [Jack Ireland](#), [Andrew R. Inglis](#), Daniel F. Ryan

2016

<http://arxiv.org/pdf/1607.06957v1.pdf>

**ДИАГНОСТИКА АНИЗОТРОПИИ УСКОРЕННЫХ ЭЛЕКТРОНОВ  
ПО НАБЛЮДАЕМОЙ ПОЛЯРИЗАЦИИ МИКРОВОЛНОВОГО  
ИЗЛУЧЕНИЯ СОЛНЕЧНЫХ ВСПЫШЕЧНЫХ ПЕТЕЛЬ**

**Моргачев** А.С.1,2, Кузнецов С.А.1,2, Мельников В.Ф.2  
Пулково «Солнечная и солнечно-земная физика – 2015», с.285

**Fine Structure in Flare Soft X-ray Light Curves**

Brian **Dennis** and Kim Tolbert:

RHESSI Science Nuggets, No. 262, Sept 2015

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Fine\\_Structure\\_in\\_Flare\\_Soft\\_X-ray\\_Light\\_Curves](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Fine_Structure_in_Flare_Soft_X-ray_Light_Curves)

**29 Oct** - 21:55: X2.3 вспышка, **пересвет** на STEREO-A,  $A=91*2/312=0,58$

**29 Oct: 21:54** – западная (N08W85) квазиимпульсная X2.3 **вспышка**, S15~4200,

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

[Zhichen Jing](#), [Wuqi Pan](#), [Yukun Yang](#), [Dechao Song](#), [Jun Tian](#), [Y. Li](#), [X. Cheng](#), [Jie Hong](#), [M. D. Ding](#)  
ApJ 2020

<https://arxiv.org/pdf/2009.10358.pdf>

**31 Oct** - 14:16: M1.9 **пересвет**  $A=29*2/312=0,19 \leftarrow 16s \rightarrow 8s \rightarrow A=29/312=0,093$

**31 Oct: 13:51** – M1.9 вспышка в AR 1877 без микроволн

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

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

Solar Phys. 2015

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

**31 Oct - 2 Nov**

**The formation of an inverse S-shaped active-region filament driven by sunspot motion and magnetic reconnection**

X.L. **Yan**, E.R. Priest, Q.L. Guo, Z.K. Xue, J.C. Wang, L.H. Yang

ApJ 832 23 2016

<http://arxiv.org/pdf/1609.04871v1.pdf>

**1 Nov: 19:53** – M6.3 вспышка в AR 1884 (S11E01), S5~410

**Photospheric Lorentz force changes in eruptive and confined solar flares**

[Samridhi Sankar Maity](#), [Ranadeep Sarkar](#), [Piyali Chatterjee](#), [Nandita Srivastava](#)

ApJ 2023

<https://arxiv.org/pdf/2312.06787.pdf>

**Indications of stellar coronal mass ejections through coronal dimmings**

Astrid M. **Veronig**, Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson  
Nature Astronomy Volume 5, p. 697-706 2021

<https://www.nature.com/articles/s41550-021-01345-9.epdf>

<https://doi.org/10.1038/s41550-021-01345-9>

<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

**Improving the Medium-Term Forecasting of Space Weather: A Big Picture Review from a**



Angelos **Vourlidas**

Front. Astron. Space Sci., 12 May 2021 |

<https://doi.org/10.3389/fspas.2021.651527>

<https://www.frontiersin.org/articles/10.3389/fspas.2021.651527/full>

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

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

ApJ 2019

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

### Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ 2016

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

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

Markus J. **Aschwanden**

ApJ 2016

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

[http://www.lmsal.com/~aschwand/eprints/2016\\_global4.pdf](http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf)

**1-4 Nov**

### THE EVOLUTION OF THE ELECTRIC CURRENT DURING THE FORMATION AND ERUPTION OF ACTIVE-REGION FILAMENTS

Jincheng **Wang**<sup>1,2</sup>, Xiaoli Yan<sup>1,3</sup>, Zhongquan Qu<sup>1</sup>, Zhike Xue<sup>1</sup>, Yongyuan Xiang<sup>1</sup>, and Hao Li<sup>1</sup>

2016 ApJ 817 156

### The Formation and Magnetic Structures of Active-region Filaments Observed by NVST, SDO, and Hinode

X.L. **Yan**, Z.K. Xue, G.M. Pan, J.C. Wang, Y.Y. Xiang, D.F. Kong, and L.H. Yang

Astrophysical Journal Supplement Series (*ApJS*) 219 17 2015

**1-8 Nov**

### Exhaustive study of three-time periods of solar activity due to single active regions: sunspot, flare, CME, and, geo-effective characteristics

[Shirsh Lata Soni](#), [Manohar Lal Yadav](#), [Radhe Syam Gupta](#), [Pyare Lal Verma](#)

Astrophysics and space science journal 2020

<https://arxiv.org/ftp/arxiv/papers/2012/2012.04853.pdf>

**2 Nov** – Затмение

новое небольшое возрастание протонов

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

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

Brief Report in Frontiers in Astronomy and Space Sciences 2023

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

### Complexity of the Upper Solar Atmosphere Revealed from Spectropolarimetry during a Solar Eclipse

Z. Q. **Qu**<sup>1,2</sup>, L. Chang<sup>1,2</sup>, G. T. Dun<sup>1</sup>, Z. Xu<sup>1</sup>, X. M. Cheng<sup>1,3</sup>, L. H. Deng<sup>1</sup>, X. Y. Zhang<sup>1</sup>, and Y. H. Jin<sup>1,2</sup>

2022 ApJ 940 150

<https://iopscience.iop.org/article/10.3847/1538-4357/ac9af4/pdf>

### What determines the X-ray intensity and duration of a solar flare?

Jeffrey W. [Reep](#), [Kalman J. Knizhnik](#)

ApJ 2019

<https://arxiv.org/pdf/1903.10564.pdf>

### Spectro-Imaging Polarimetry of the Local Corona During Solar Eclipse

Z. Q. [Qu](#), G. T. Dun, L. Chang, G. Murray, X. M. Cheng, X. Y. Zhang, L. H. Deng

Solar Physics February 2017, 292:37

### Spectro-Imaging Polarimetry of the Local Corona During Solar Eclipse

Z. Q. [Qu](#), G. T. Dun, L. Chang, G. Murray, X. M. Cheng, X. Y. Zhang, L. H. Deng

Solar Physics February 2017, 292:37

### The formation of an inverse S-shaped active-region filament driven by sunspot motion and magnetic reconnection

X.L. [Yan](#), E.R. Priest, Q.L. Guo, Z.K. Xue, J.C. Wang, L.H. Yang

ApJ 2016

<http://arxiv.org/pdf/1609.04871v1.pdf>

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

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

Solar Phys. 2015

**3 Nov:** Total Solar Eclipse 05:22– квазиимпульсная M5.0 вспышка в AR 1884 (S12W16), S15~210

### ПРОСТРАНСТВЕННЫЕ И ВРЕМЕННЫЕ ОСОБЕННОСТИ ПОВЕДЕНИЯ МИКРОВОЛНОВОГО И УЛЬТРАФИОЛЕТОВОГО ИЗЛУЧЕНИЯ В ЭРУПТИВНЫХ СОБЫТИЯХ

[БАКУНИНА И.А.](#)<sup>1</sup>, [МЕЛЬНИКОВ В.Ф.](#)<sup>2</sup>, [ШАИН А.В.](#)<sup>2</sup>, [АБРАМОВ-МАКСИМОВ В.Е.](#)<sup>2</sup>, [ОРГАЧЕВ А.С.](#)<sup>3</sup>

*Изв. Крао* Том: 118Номер: 1 Год: 2022 Страницы: 65-74

[https://www.elibrary.ru/download/elibrary\\_48073416\\_76156594.pdf](https://www.elibrary.ru/download/elibrary_48073416_76156594.pdf)

### Indications of stellar coronal mass ejections through coronal dimmings

Astrid M. [Veronig](#), Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson

Nature Astronomy Volume 5, p. 697-706 2021

<https://www.nature.com/articles/s41550-021-01345-9.epdf>

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<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

### Cosmic Meteorology

[Mike Lockwood](#), [Mat Owens](#)

Astronomy and Geophysics 2021

<https://arxiv.org/ftp/arxiv/papers/2105/2105.12559.pdf>

### The SDO/EVE Solar Irradiance Coronal Dimming Index Catalog. I. Methods and Algorithms

James Paul [Mason](#)<sup>1,2</sup>, Raphael Attie<sup>1</sup>, Charles N. Arge<sup>1</sup>, Barbara Thompson<sup>1</sup>, and Thomas N. Woods<sup>2</sup>

2019 ApJS 244 13

<https://iopscience.iop.org/article/10.3847/1538-4365/ab380e/pdf>

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

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

ApJ 2019  
<https://arxiv.org/pdf/1908.08643.pdf>

### **Tethered Prominence-CME Systems Captured during the 2012 November 13 and 2013 November 3 Total Solar Eclipses**

Miloslav **Druckmüller**<sup>1</sup>, Shadia R. Habbal<sup>2</sup>, Nathalia Alzate<sup>3</sup>, and Constantinos Emmanouilidis<sup>4</sup>  
2017 ApJL 851 L41  
<http://sci-hub.tw/10.3847/2041-8213/aa9ed5>

### **Dynamics of Large-scale Coronal Structures as Imaged during the 2012 and 2013 Total Solar Eclipses**

Nathalia **Alzate**<sup>1</sup>, Shadia R. Habbal<sup>2</sup>, Miloslav Druckmüller<sup>3</sup>, Constantinos Emmanouilidis<sup>4</sup>, and Huw Morgan<sup>5</sup>  
2017 ApJ 848 84

### **Large Scale Coronal Structures Imaged During the 2012/2013 Total Solar Eclipses**

Nathalia **Alzate**, Huw Morgan, Shadia R. Habbal, Miloslav Druckmüller, Constantinos Emmanouilidis  
UKSP Nuggets #80, 2017  
[www.uksolphys.org/?p=13114](http://www.uksolphys.org/?p=13114)

### **Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions**

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima  
ApJ 2016  
<https://arxiv.org/pdf/1611.05047v1.pdf>

### **Turnover Frequency in Solar Microwave Bursts with an Extremely Flat Optically Thin Spectrum**

Q. W. **Song**, H. Nakajima, G. L. Huang, B. L. Tan, Y. Huang, Z. Wu  
Solar Phys. 2016  
<http://link.springer.com/article/10.1007/s11207-016-1004-0>

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

Markus J. **Aschwanden**  
ApJ 2016  
<http://arxiv.org/pdf/1605.04952v1.pdf> File  
[http://www.lmsal.com/~aschwand/eprints/2016\\_global4.pdf](http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf)

### **Mass motion in upper solar chromosphere detected from solar eclipse observation**

Zhi **Li**, Zhongquan Qu, Xiaoli Yan, Guangtao Dun,  
Astrophysics and Space Science May 2016, 361:159

**4 Nov** SEP

### **Probing shock geometry via the charge to mass ratio dependence of heavy ion spectra from multiple spacecraft observations of the 2013 November 4 event**

Lulu **Zhao**, Gang Li, G. M. Mason, C. Cohen, R. A. Mewaldt, M. I. Desai, R. W. Ebert, M. A. Dayeh  
Research in Astron. Astrophys. 2016  
<https://arxiv.org/pdf/1609.09479v1.pdf>

### **Injection of solar energetic particles into both loop legs of a magnetic cloud**

Nina **Dresing**, Ra?l Gómez-Herrero, Bernd Heber, Miguel Angel Hidalgo, Andreas Klassen, Manuela Temmer, Astrid Veronig  
A&A 2016  
<http://arxiv.org/pdf/1601.00491v1.pdf>

**5 Nov: 22:12 – очень импульсная X3.0** вспышка в AR 1890 (S12E46), S15~1400; почти без протонов. **До и после еще несколько импульсных вспышек балла M и C.**

A CME was observed off the northeast limb and north pole after a filament eruption which began near 01:25 UTC. Preliminary analysis indicate that the CME was not Earth directed. A relatively slow and unimpressive partial halo CME was observed after the X3 event late in the day.

### Circular-ribbon flares and the related activities

**Review**

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

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

### When it rippled in one place and exploded in another

[Ivan Zimovets](#)

RHESSI Science Nuggets #465 Dec 2023

[https://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/When\\_it\\_rippled\\_in\\_one\\_place\\_and\\_exploded\\_in\\_another](https://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/When_it_rippled_in_one_place_and_exploded_in_another)

### The Mean Temperatures of CME-Related Dimming Masses

Emily Thomson, Hugh Hudson

Solar Phys. 298, Article number: 130 (2023)

<https://link.springer.com/content/pdf/10.1007/s11207-023-02222-6.pdf>

### ПРЕДВСПЫШЕЧНЫЕ РЕНТГЕНОВСКИЕ ПУЛЬСАЦИИ С ИСТОЧНИКАМИ ВНЕ АКТИВНОЙ ОБЛАСТИ ОСНОВНОЙ ВСПЫШКИ

[Зимовец И.В.](#), [Шарыкин И.Н.](#), [Кальтман Т.И.](#), [Ступишин А.Г.](#), [Низамов Б.А.](#)

Г и А Том: 63Номер: 5 Год: 2023 Страницы: 547-560

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

[Markus J. Aschwanden](#)

ApJ 2021

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

### Indications of stellar coronal mass ejections through coronal dimmings

Astrid M. [Veronig](#), Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson

Nature Astronomy Volume 5, p. 697-706 2021

<https://www.nature.com/articles/s41550-021-01345-9.epdf>

<https://doi.org/10.1038/s41550-021-01345-9>

<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

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

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

Space Science Reviews 2021

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

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

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

ApJ 2021

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

### Forecasting the Remaining Duration of an Ongoing Solar Flare

[Jeffrey W. Reep](#), [Will T. Barnes](#)  
Space Weather      2021  
<https://arxiv.org/pdf/2103.03957.pdf>

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

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

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

Douglas F. da [Silva](#), [Paulo J. A. Simões](#), [R. F. Hidalgo Ramírez](#), [Adriana Válio](#)  
Solar Phys.      2020  
<https://arxiv.org/pdf/2005.01420.pdf>

### **Spatio-temporal energy partitioning in a non-thermally dominated two-loop solar flare**

Galina G. [Motorina](#), [Gregory D. Fleishman](#), [Eduard P. Kontar](#)  
ApJ      Volume 890, Issue 1, id.75      2020  
<https://arxiv.org/pdf/2001.02009.pdf>  
<https://iopscience.iop.org/article/10.3847/1538-4357/ab67d1/pdf>  
<https://sci-hub.st/10.3847/1538-4357/ab67d1>

### **Estimation of Key Sunquake Parameters through Hydrodynamic Modeling and Cross-Correlation Analysis**

John T. [Stefan](#), [Alexander G. Kosovichev](#)  
ApJ      2019  
<https://arxiv.org/pdf/1911.06839.pdf>

### **Sunquakes of Solar Cycle 24**

I.N. [Sharykin](#), [A.G. Kosovichev](#)  
ApJ      2019  
<https://arxiv.org/pdf/1911.04197.pdf>

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

Aiying [Duan](#), [Chaowei Jiang](#), [Wen He](#), [Xueshang Feng](#), [Peng Zou](#), [Jun Cui](#)  
ApJ      2019  
<https://arxiv.org/pdf/1908.08643.pdf>

### **Center-to-Limb Variation of Solar Bursts Polarization at Millimeter Wavelengths**

R. F. Hidalgo [Ramírez](#), A. Morosi, D. Silva, P. J. A. Simões, A. Valio  
[Solar Physics](#)      August 2019, 294:108  
[sci-hub.se/10.1007/s11207-019-1503-x](https://sci-hub.se/10.1007/s11207-019-1503-x)

### **Investigation of white-light emission in circular-ribbon flares**

Yongliang [Song](#), [Hui Tian](#)  
ApJ      2018  
<https://arxiv.org/pdf/1810.02958.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>

### **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>

### **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>

### **Spectral Trends of Solar Bursts at Sub-THz Frequencies**

L. O. T. [Fernandes](#), P. Kaufmann, E. Correia, C. G. Giménez de Castro, A. S. Kudaka, A. Marun, P. Pereyra, J.-P. Raulin, A. B. M. Valio

[Solar Physics](#) January 2017, 292:21

<http://sci-hub.cc/10.1007/s11207-016-1043-6>

### **Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions**

Shin [Toriumi](#), Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ 2016

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

### **Joint radio, EUV, and X-ray analysis of the 2013 November 5 cold flare**

Galina [Motorina](#)\*1 , Eduard Kontar<sup>2</sup> , and Gregory Fleishman<sup>3</sup>

CESRA 2016 p.63

[http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016\\_prog\\_abs\\_book\\_v3.pdf](http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v3.pdf)

## **5-10 Nov**

### **On the use of relative field line helicity as an indicator for solar eruptivity**

[K. Moraitis](#), [S. Patsourakos](#), [A. Nindos](#), [J.K. Thalmann](#), [É. Pariat](#)

A&A 2023

<https://arxiv.org/pdf/2312.13950.pdf>

### **Magnetic Helicity and Free Magnetic Energy as Tools to Probe Eruptions in two Differently Evolving Solar Active Regions**

[E. Liokati](#), [A. Nindos](#), [M. K. Georgoulis](#)

A&A 2023

<https://arxiv.org/pdf/2301.08495.pdf>

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

Dattaraj B. [Dhuri](#)<sup>1,2</sup>, Shamik Bhattacharjee<sup>1</sup>, Shravan M. Hanasoge<sup>1,2</sup>, and Sashi Kiran Mahapatra<sup>1</sup>  
2022 ApJ 939 64

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

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

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

Space Science Reviews 2021

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

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

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

2020

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

**6 Nov**

## Circular-ribbon flares and the related activities

**Review**

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

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

## On the Role of Interplanetary Shocks in Accelerating MeV Electrons

N. Talebpour [Sheshvan](#), [N. Dresing](#), [R. Vainio](#), [A. Afanasiev](#), [D. E. Morosan](#)

A&A 2023

<https://arxiv.org/pdf/2301.05587.pdf>

## 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>

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

Markus J. [Aschwanden](#)

ApJ 2016

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

[http://www.lmsal.com/~aschwand/eprints/2016\\_global4.pdf](http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf)

## Understanding CME and associated shock in the solar corona by merging multi wavelengths observation

Pietro [Zucca](#), Monique Pick, Pascal Demoulin, Alain Kerdraon, Alain Lecacheux, Peter T. Gallagher

2014

<http://arxiv.org/pdf/1409.3691v1.pdf>

**6-10 Nov**

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

Dattaraj B. [Dhuri](#)<sup>1,2</sup>, Shamik Bhattacharjee<sup>1</sup>, Shravan M. Hanasoge<sup>1,2</sup>, and Sashi Kiran Mahapatra<sup>1</sup>  
2022 ApJ 939 64

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

## A STATISTICAL STUDY OF FLARE PRODUCTIVITY ASSOCIATED WITH SUNSPOT PROPERTIES IN DIFFERENT MAGNETIC TYPES OF ACTIVE REGIONS

Ya-Hui [Yang](#)<sup>1</sup>, Min-Shiu Hsieh<sup>2</sup>, Hsiu-Shan Yu<sup>3</sup>, and P. F. Chen<sup>4</sup>

2017 ApJ 834 150

<http://sci-hub.cc/doi/10.3847/1538-4357/834/2/150>

**7 Nov** - 00:16: M1.8 **пересвет**  $A=19*2/312=0,12 \leftarrow 16s$   $8s \rightarrow$  **00:06**  $A=11*2/312=0.071$

**7 Nov: 00:02 – LDE M2 вспышка и небольшое возрастание протонов**

~10 UT – серьёзная залимбовая W эрупция с крупным CME, сильно отклоняющим корональные лучи

**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>

**Circular-ribbon flares and the related activities**

**Review**

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics 2024

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

**Detection of decayless oscillations in solar transition region loops L4**

Yuhang [Gao](#), Zhenyong Hou, Tom Van Doorselaere and Mingzhe Guo

A&A Letter Volume 681, January 2024

<https://doi.org/10.1051/0004-6361/202348702>

<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

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

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

Brief Report in Frontiers in Astronomy and Space Sciences 2023

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

**Investigation on the Spatiotemporal Structures of Supra-Arcade Spikes**

[Rui Liu](#), [Yuming Wang](#)

A&A 2021

<https://arxiv.org/pdf/2106.04752.pdf>

**Narrowband Spikes Observed during the 2013 November 7 Flare**

Marian [Karlický](#)<sup>1</sup>, Jan Benáček<sup>2</sup>, and Ján Rybák<sup>3</sup>

2021 ApJ 910 108

<https://arxiv.org/pdf/2104.01345.pdf>

<https://doi.org/10.3847/1538-4357/abe62b>

**Energy Partition in Four Confined Circular-Ribbon Flares**

[Z. M. Cai](#), [Q. M. Zhang](#), [Z. J. Ning](#), [Y. N. Su](#), [H. S. Ji](#)

Solar Phys. 2021

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

**Multispacecraft Observation of Unidirectional and Bidirectional Alfvén Waves within Large-scale Magnetic Clouds**

Zehao [Wang](#)<sup>1,2</sup>, Xueshang Feng<sup>1</sup>, and Jianchuan Zheng

2019 ApJL 887 L18

[sci-hub.se/10.3847/2041-8213/ab595d](https://arxiv.org/abs/1907.12673)

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

Nishtha [Sachdeva](#)

Ph.D. **Thesis** 2019

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

**Decameter Type IV Burst Associated with a behind-the-limb CME Observed on 7 November 2013**

V.N.[Melnik](#), [A.I.Brazhenko](#), [A.A.Konovalenko](#), [V.V.Dorovskyy](#), [H.O.Rucker](#), [M.Panchenko](#), [A.V.Frantsuzenko](#), [M.V. Shevchuk](#)

Solar Phys. 2018

<https://arxiv.org/ftp/arxiv/papers/1803/1803.01147.pdf>



**Decameter type IV burst associated with behind-limb CME observed on November 7, 2013**  
**Melnik** V., Brazhenko A., Dorovskyy V., Rucker H., Panchenko M., Frantsuzenko A., Shevchuk M.  
Proceedings of Ninth Workshop “Solar Influences on the Magnetosphere, Ionosphere and Atmosphere”  
Sunny Beach, Bulgaria, May 30 - June 3, 2017, p. 13-18  
[http://ws-sozopol.stil.bas.bg/2017Sunny/Proceedings2017\\_V3.pdf](http://ws-sozopol.stil.bas.bg/2017Sunny/Proceedings2017_V3.pdf)

**On the Directivity of Low-Frequency Type IV Radio Bursts**  
Nat **Gopalswamy**, Sachiko Akiyama, Pertti Mäkelä, Seiji Yashiro, Iver H. Cairns  
URSI Asia-Pacific Radio Science Conference in Seoul, August 21-25, 2015 **2016**  
<http://arxiv.org/pdf/1605.02223v1.pdf>

**Injection of solar energetic particles into both loop legs of a magnetic cloud**  
Nina **Dresing**, Ra?l Gómez-Herrero, Bernd Heber, Miguel Angel Hidalgo, Andreas Klassen, Manuela Temmer, Astrid Veronig  
A&A **2016**  
<http://arxiv.org/pdf/1601.00491v1.pdf>

**A statistical correlation of sunquakes based on their seismic, white light, and X-ray emission**  
J.C. **Buitrago-Casas**, J.C. Martinez Oliveros, C. Lindsey, B. Calvo-Mozo, S. Krucker, L. Glesener, S. Zharkov  
Solar Phys. **2015**  
<http://arxiv.org/pdf/1502.07798v1.pdf>

**8 Nov: 04:26 - очень импульсная X1.1/2B вспышка в AR 1890 (S14E15), S15~3800; Корональная волна; A full halo CME; почти без протонов. До и после еще несколько импульсных вспышек балла M и C.**

**Analysis of modeled 3D solar magnetic field during 30 X/M-class solar flares**  
**Seth H. Garland**<sup>1\*</sup> **Vasyl B. Yurchyshyn**<sup>2</sup> **Robert D. Loper**<sup>3</sup> Benjamin F. Akers<sup>4</sup> **Daniel J. Emmons**<sup>1</sup>  
Front. Astron. Space Sci. 11: 1369749. **2024**  
<https://www.frontiersin.org/articles/10.3389/fspas.2024.1369749/pdf>  
<https://doi.org/10.3389/fspas.2024.1369749>

**Photospheric Lorentz force changes in eruptive and confined solar flares**  
**Samridhhi Sankar Maity**, **Ranadeep Sarkar**, **Piyali Chatterjee**, **Nandita Srivastava**  
ApJ **2023**  
<https://arxiv.org/pdf/2312.06787.pdf>

**Separating the effects of earthside and far side solar events. A case study**  
Silja **Pohjolainen**, Nasrin Talebpour Sheshvan, Christian Monstein  
**Advances in Space Research** **2023**  
<https://www.sciencedirect.com/science/article/pii/S0273117723007317>

**On the Role of Interplanetary Shocks in Accelerating MeV Electrons**  
N. Talebpour **Sheshvan**, **N. Dresing**, **R. Vainio**, **A. Afanasiev**, **D. E. Morosan**  
A&A **2023**  
<https://arxiv.org/pdf/2301.05587.pdf>

**Magnetic Imprints of Eruptive and Noneruptive Solar Flares as Observed by Solar Dynamics Observatory**  
N. **Vasantharaju**<sup>1,2</sup>, P. Vemareddy<sup>1</sup>, B. Ravindra<sup>1</sup>, and V. H. Doddamani<sup>3</sup>

2022 ApJ 927 86

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

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

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

A&A 2021

<https://arxiv.org/pdf/2106.08781.pdf>

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

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

ApJ 2021

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

### **A 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>

### **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>

### **Transient Mass Loss Analysis of Solar Observations using Stellar Methods**

M. K. [Crosley](#), R. A. Osten, C. Norman

2017

<https://arxiv.org/pdf/1707.01928.pdf>

### **CONSTRAINING THE SOLAR CORONAL MAGNETIC FIELD STRENGTH USING SPLIT-BAND TYPE II RADIO BURST OBSERVATIONS**

P. [Kishore](#)<sup>1</sup>, R. Ramesh<sup>1</sup>, K. Hariharan<sup>1</sup>, C. Kathiravan<sup>1</sup>, and N. Gopalswamy

2016 ApJ 832 59

<http://sci-hub.cc/10.3847/0004-637X/832/1/59>

### **Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions**

Shin [Toriumi](#), Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ 2016

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

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

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

Solar Phys. 2016 Open Access File

### **RAPID PENUMBRA AND LORENTZ FORCE CHANGES IN AN X1.0 SOLAR FLARE**

Zhe [Xu](#)<sup>1,2</sup>, Yunchun Jiang<sup>1</sup>, Jiayang Yang<sup>1</sup>, Bo Yang<sup>1,2</sup>, and Yi Bi

2016 ApJ 820 L21

### **The nonpotentiality of coronae of solar active regions, the dynamics of the surface magnetic field, and the potential for large flares**

C.J. [Schrijver](#)

ApJ 2016

<http://arxiv.org/pdf/1602.07244v1.pdf>

**9 Nov**

### **The Solar X-ray Corona**

**Review**

[Paola Testa](#), [Fabio Reale](#)

Book chapter. To appear in Springer's "Handbook of X-ray and Gamma-ray Astrophysics" (eds. A. Santangelo and C. Bambi), Section "The Sun, Stars & Planets" (eds. G. Micela & B. Stelzer) **2022**

<https://arxiv.org/pdf/2206.03530.pdf>

### **Study of High-temperature Emission in Solar Active Regions**

M. [Asgari-Targhi](#)<sup>1</sup>, A. A. van Ballegooijen<sup>1</sup>, and A. R. Davey<sup>2</sup>

**2019** ApJ 881 107

[sci-hub.se/10.3847/1538-4357/ab2e01](http://sci-hub.se/10.3847/1538-4357/ab2e01)

### **The nature of energy source powering solar coronal loops driven by nanoflares**

L. P. [Chitta](#), [H. Peter](#), [S. K. Solanki](#)

A&A 615, L9 (**2018**)

<https://www.aanda.org/articles/aa/pdf/2018/07/aa33404-18.pdf>

<https://arxiv.org/pdf/1806.11045.pdf>

### **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](http://www.gaoran.ru/russian/diss/Motorina_diss.pdf)

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

### **Are All Flare Ribbons Simply Connected to the Corona?**

Philip G. [Judge](#)<sup>1</sup>, Alin Paraschiv<sup>2,3</sup>, Daniela Lacatus<sup>2,3</sup>, Alina Donea<sup>2</sup>, and Charlie Lindsey<sup>4</sup>

**2017** ApJ 838 138

<http://sci-hub.cc/10.3847/1538-4357/aa656c>

### **Syrovatskii's "constant density" approximation**

Hugh [Hudson](#) and Paulo Simões

RHESSI Science Nuggets, #288 Dec **2016**

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Syrovatskii%27s\\_"constant\\_density"\\_approximation](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Syrovatskii%27s_)

### **Electron acceleration and hard X-ray emission from SOL2013-11-09**

Yuri [Tsap](#) and Galina Motorina.

RHESSI Science Nugget No. 273, May **2016**

[http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Electron\\_acceleration\\_and\\_hard\\_X-ray\\_emission\\_from\\_SOL2013-1](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Electron_acceleration_and_hard_X-ray_emission_from_SOL2013-1)

### **УСКОРЕНИЕ ЭЛЕКТРОНОВ И НАГРЕВ ВСПЫШЕЧНОЙ ПЛАЗМЫ КРОНАЛЬНЫХ ПЕТЕЛЬ**

[Цап](#) Ю.Т.<sup>1,2</sup>, [Моторина](#) Г.Г.<sup>2</sup>, [Копылова](#) Ю.Г.

Пулково «Солнечная и солнечно-земная физика – **2015**», с.379

### **Impulsive Heating of Solar Flare Ribbons Above 10 MK**

Paulo J. A. [Simões](#), David R. Graham, Lyndsay Fletcher

**Solar Phys.** **2015**

<http://arxiv.org/pdf/1505.03384v1.pdf>

### **Direct observation of the energy release site in a solar flare by SDO/AIA, Hinode/EIS and RHESSI**

Paulo J. A. **Simões**, David R. Graham, Lyndsay Fletcher

A&A **2015**

<http://arxiv.org/pdf/1503.01491v1.pdf>

### **Evidence of Non-Thermal Particles in Coronal Loops Heated Impulsively by Nanoflares**

Paola **Testa** (1), Bart De Pontieu (2,3), Joel Allred (4), Mats Carlsson (3), Fabio Reale (5), Adrian Daw (4), Viggo Hansteen (3), Juan Martinez-Sykora (6), Wei Liu (2,7), Ed DeLuca (1), Leon Golub (1), Sean McKillop (1), Kathy Reeves (1), Steve Saar (1), Hui Tian (1), Jim Lemen (2), Alan Title (2), Paul Boerner (2), Neal Hurlburt (2), Ted Tarbell (2), J.P. Wuelser (2), Lucia Kleint (2,6), Charles Kankelborg (8), Sarah Jaeggli

Science, **2014**

Movies are available at: [http://www.lmsal.com/~ptesta/iris\\_science\\_mov/](http://www.lmsal.com/~ptesta/iris_science_mov/)

<http://arxiv.org/pdf/1410.6130v1.pdf>

### **9-10 Nov**

#### **Energy conversion rate of an active region transient brightening estimated by a spectroscopic observation of Hinode**

[Toshiki Kawai](#), [Shinsuke Imada](#)

ApJ **2021**

<https://arxiv.org/pdf/2106.06208.pdf>

**10 Nov: 05:14** – ещё одна **очень импульсная X1.1/2B** вспышка в AR 1890 (S14W13), S9~580

**Корональная волна, 304 А; A CME was observed in STEREO-A imagery just after the flare. Only a small CME was observed after the X1 flare**

### **Circular-ribbon flares and the related activities**

**Review**

[Qingmin Zhang](#)

Reviews of Modern Plasma Physics **2024**

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

### **Statistical analysis of circular-ribbon flares**

[Yanjie Zhang](#), [Qingmin Zhang](#), [Dechao Song](#), [Shuting Li](#), [Jun Dai](#), [Zhe Xu](#), [Haisheng Ji](#)

Astrophysical Journal Supplement Series **2022**

<https://arxiv.org/pdf/2203.12819.pdf>

### **Detections of Multi-Periodic Oscillations during a Circular Ribbon Flare**

[Zongjun Ning](#), [Ya Wang](#), [Zhenxiang Xiang](#), [Dong Li](#)

Solar Phys. **2021**

<https://arxiv.org/pdf/2112.03446.pdf>

### **An Eruptive Circular-ribbon Flare with Extended Remote Brightenings**

[Chang Liu](#), [Avijeet Prasad](#), [Jeongwoo Lee](#), [Haimin Wang](#)

ApJ **2020**

<https://arxiv.org/pdf/2007.14428.pdf>

### **A Statistical Study of the Magnetic Imprints of X-Class Flares using SDO/HMI Vector Magnetograms**

Zekun **Lu**, [Weiguang Cao](#), [Gaoxiang Jin](#), [Yining Zhang](#), [Mingde Ding](#), [Yang Guo](#)

ApJ **2018**

<https://arxiv.org/pdf/1803.08310.pdf>

### **Does Nearby Open Flux Affect the Eruptivity of Solar Active Regions?**

Marc L. **DeRosa**, [Graham Barnes](#)

ApJ            2018  
<https://arxiv.org/pdf/1802.01199.pdf>

### **Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions**

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima  
ApJ    2016  
<https://arxiv.org/pdf/1611.05047v1.pdf>

### **Turnover Frequency in Solar Microwave Bursts with an Extremely Flat Optically Thin Spectrum**

Q. W. **Song**, H. Nakajima, G. L. Huang, B. L. Tan, Y. Huang, Z. Wu  
Solar Phys.    2016  
<http://link.springer.com/article/10.1007/s11207-016-1004-0>

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

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

### **The nonpotentiality of coronae of solar active regions, the dynamics of the surface magnetic field, and the potential for large flares**

C.J. **Schrijver**  
ApJ    2016  
<http://arxiv.org/pdf/1602.07244v1.pdf>

**11 Nov** - 11:26: M2.4 вспышка, **пересвет** на STEREO-B,  $B=22,5 \cdot 2/312=0,14$

### **Investigation on the Spatiotemporal Structures of Supra-Arcade Spikes**

**Rui Liu**, **Yuming Wang**  
A&A    2021  
<https://arxiv.org/pdf/2106.04752.pdf>

**11-13 Nov**

### **Multispacecraft Observation of Unidirectional and Bidirectional Alfvén Waves within Large-scale Magnetic Clouds**

Zehao **Wang**<sup>1,2</sup>, Xueshang Feng<sup>1</sup>, and Jianchuan Zheng  
2019 ApJL 887 L18  
[sci-hub.se/10.3847/2041-8213/ab595d](http://sci-hub.se/10.3847/2041-8213/ab595d)

### **Photospheric Flow Field Related to the Evolution of the Sun's Polar Magnetic Patches Observed by Hinode SOT**

Anjali John **Kaithakkal**, **Y. Suematsu**, **M. Kubo**, **Y. Iida**, **D. Shiota**, **S. Tsuneta**  
ApJ, 2015  
<http://arxiv.org/pdf/1412.8023v1.pdf>

**12 Nov**: 11:18 – неимпульсная M2.4 вспышка в дальней восточной AR 1897 или 1895 [S19E62], S5~150.

### **The 2013 November 12 Solar Energetic Electron Event Associated with Solar Jets**

Wen **Wang**<sup>1,2</sup>, Andrea Francesco Battaglia<sup>2,3</sup>, Säm Krucker<sup>2,4</sup>, and Linghua Wang<sup>1</sup>  
2023 ApJ 950 118  
<https://iopscience.iop.org/article/10.3847/1538-4357/accc86/pdf>

**14-19 Nov**

### **Sunspot Rotation in High- and Low-Flaring Active Regions**

Richard Grimes & [Balázs Pintér](#)

[Solar Physics](#) volume 297, Article number: 109 (2022)

<https://link.springer.com/content/pdf/10.1007/s11207-022-02040-2.pdf>

### **Probing sunspots with two-skip time–distance helioseismology**

Thomas L. [Duvall](#) Jr.1, Paul S. Cally2, Damien Przybylski2,1, Kaori Nagashima1 and Laurent Gizon1,3  
A&A 613, A73 (2018)

<http://sci-hub.tw/https://www.aanda.org/articles/aa/abs/2018/05/aa32424-17/aa32424-17.html>

### **Flux rope proxies and fan-spine structures in active region NOAA 11897**

Y. J. [Hou](#), T. Li, J. Zhang

A&A 2016

<http://arxiv.org/pdf/1606.09322v1.pdf>

**15 Nov**

### **Spatial Distributions of Sunspot Oscillation Modes at Different Temperatures**

Zhengkai [Wang](#), [Song Feng](#), [Linhua Deng](#), [Yao Meng](#)

Research in Astronomy and Astrophysics 2019

<https://arxiv.org/pdf/1908.04906.pdf>

**16 Nov:** высокоскоростной поток из приличной КД с северной Vz-компонентой у Земли и без геомагнитной бури.

**18 Nov**

### **A secondary fan-spine magnetic structure in active region 11897**

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

ApJ 2018

<https://arxiv.org/pdf/1811.11936.pdf>

### **On the extent of the moat flow in axisymmetric sunspots**

[M. Verma](#), [P. Kummerow](#), [C. Denker](#)

Astronomische Nachrichten/Astronomical Notes 2018

<https://arxiv.org/pdf/1805.04356.pdf>

### **Long-Term Oscillations of Sunspots and a Special Class of Artifacts in SOHO(MDI) and SDO(HMI) Data**

V.I. [Efremov](#), [A.A. Soloviev](#), [L.D. Parfinenko](#), [A. Riehoainen](#), [E. Kirichek](#), [V.V. Smirnova](#), [Y.N. Varun](#), [I. Bakunina](#), [I. Zhivanovich](#)

2018

<https://arxiv.org/ftp/arxiv/papers/1802/1802.06379.pdf>

### **Modeling of Solar Atmosphere Parameters Above Sunspots Using RATAN-600 Microwave Observations**

A. G. [Stupishin](#), [T. I. Kaltman](#), [V. M. Bogod](#), [L. V. Yasnov](#)

[Solar Physics](#) January 2018, 293:13

<https://link.springer.com/content/pdf/10.1007%2Fs11207-017-1228-7.pdf>

**19 Nov** – 10:25 – X1.0 вспышка; **пересвет** на STEREO-A:  $A=59*2/312=0,38$

В списке GOES и Events ошибка в координатах; правильно S13W79 11893

**19 Nov:** 10:26 – короткая, но неимпульсная X1.0 вспышка в западной AR 1893 (S13W69), **сильные микроволны S15~5100, наш II тип, протоны слабые, halo CME**

### Indications of stellar coronal mass ejections through coronal dimmings

Astrid M. **Veronig**, Petra Odert, Martin Leitzinger, Karin Dissauer, Nikolaus C. Fleck, Hugh S. Hudson  
Nature Astronomy Volume 5, p. 697-706 **2021**

<https://www.nature.com/articles/s41550-021-01345-9.epdf>

<https://doi.org/10.1038/s41550-021-01345-9>

<https://arxiv.org/ftp/arxiv/papers/2110/2110.12029.pdf>

### Temporal and Spatial Association Between a Solar Flare, CME, and Radio Burst on 19 November 2013

[A. Shanmugaraju](#), [M. Syed Ibrahim](#), [K. Suresh](#), [P. Vijayalakshmi](#) & [Sajal Kumar Dhara](#)

*Solar Physics* volume 296, Article number: 77 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01823-3.pdf>

<https://doi.org/10.1007/s11207-021-01823-3>

### Small Size Ground Level Enhancements During Solar Cycle 24

Leonty I. **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>

### Early-stage Solar Energetic Particle Acceleration by Coronal Mass Ejection-driven Shocks with Realistic Seed Spectra. I. Low Corona

Kamen A. **Kozarev**<sup>1</sup>, Maher A. Dayeh<sup>2,3</sup>, and Ashraf Farahat<sup>4</sup>

**2019** ApJ 871 65

[sci-hub.tw/10.3847/1538-4357/aaf1ce](http://sci-hub.tw/10.3847/1538-4357/aaf1ce)

### Fan Loops Observed by IRIS, EIS, and AIA

Avyarthana **Ghosh**<sup>1,2</sup>, Durgesh Tripathi<sup>1</sup>, G. R. Gupta<sup>1</sup>, Vanessa Polito<sup>3</sup>, Helen E. Mason<sup>3</sup>, and Sami K. Solanki<sup>4</sup>,

**2017** ApJ 835 244

### CONSTRAINING THE SOLAR CORONAL MAGNETIC FIELD STRENGTH USING SPLIT-BAND TYPE II RADIO BURST OBSERVATIONS

P. **Kishore**<sup>1</sup>, R. Ramesh<sup>1</sup>, K. Hariharan<sup>1</sup>, C. Kathiravan<sup>1</sup>, and N. Gopalswamy

**2016** ApJ 832 59

<http://sci-hub.cc/10.3847/0004-637X/832/1/59>

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

Markus J. **Aschwanden**

ApJ **2016**

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

[http://www.lmsal.com/~aschwand/eprints/2016\\_global4.pdf](http://www.lmsal.com/~aschwand/eprints/2016_global4.pdf)

### 21 Nov

### Prevalence of non-stationarity in quasi-periodic pulsations (QPPs) associated with M- and X-class solar flares

[Tishtrya Mehta](#), [Anne-Marie Broomhall](#), [Laura Hayes](#)

MNRAS **2023**

<https://arxiv.org/pdf/2305.19737.pdf>

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

A. **Nindos**, S. Patsourakos, A. Vourlidas, C. Tagikas  
ApJ **2015**  
<http://arxiv.org/pdf/1507.03766v1.pdf>

### **Direct observations of magnetic flux rope formation during a solar coronal mass ejection**

Hongqiang **Song**, Jie Zhang, Yao Chen, Xin Cheng  
ApJL, **2014**  
<http://arxiv.org/pdf/1408.2000v1.pdf>

**21 Nov – 19 Dec**

### **Comparison of Potential Field Solutions for Carrington Rotation 2144†**

Keiji **Hayashi**, Shangbin Yang, Yuagyong Deng  
JGR **2016**

**23 Nov** – 02:36 – M1.1 **вспышка; пересвет** на STEREO-A:  $A=10 \cdot 2/312=0,06$   
13:26 – M1.0 **вспышка; пересвет** на STEREO-A:  $A=13 \cdot 2/312=0,08$

**25 Nov**

### **Formation and material supply of an active-region filament associated with newly emerging flux**

Jincheng **Wang**, [Xiaoli Yan](#), [Qiaoling Guo](#), [Defang Kong](#), [Zhike Xue](#), [Liheng Yang](#), [Qiaoling Li](#)  
MNRAS 488, Issue 3, September **2019**, Pages 3794–3803  
[sci-hub.se/10.1093/mnras/stz1935](http://sci-hub.se/10.1093/mnras/stz1935)

**28-30** November: many CMEs with a backside origin was observed.

**27 Nov**: Several CMEs were observed during the day. The largest had its origin in a filament eruption that began late on November 26 in the southwest quadrant (and across the limb to the backside).

Ещё: середина дня - приличная эрупция большого N-центрального волокна.

**28 Nov**

### **Using Stereoscopic Observations of Cometary Plasma Tails to Infer Solar Wind Speed**

Long **Cheng**<sup>1,2,3</sup>, Quanhao Zhang<sup>1,2,3</sup>, Yuming Wang<sup>1,2,3</sup>, Xiaolei Li<sup>1,2,3</sup>, and Rui Liu  
**2020** ApJ 897 87  
<https://sci-hub.tw/https://iopscience.iop.org/article/10.3847/1538-4357/ab93b6>

**29 Nov**

### **Can One Predict Coronal Mass Ejection Arrival Times With Thirty-Minute Accuracy?**

Gábor **Tóth**, [Bart van der Holst](#), [Ward Manchester IV](#)  
Space Weather e2023SW003463 [Volume21, Issue5](#) **2023**  
<https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1029/2023SW003463>

### **Sunward-propagating Solar Energetic Electrons inside Multiple Interplanetary Flux Ropes**

Raúl **Gómez-Herrero**<sup>1</sup>, Nina Dresing<sup>2</sup>, Andreas Klassen<sup>2</sup>, Bernd Heber<sup>2</sup>, Manuela Temmer<sup>3</sup>, Astrid Veronig<sup>3</sup>, Radoslav Bučík<sup>4,5</sup>, Miguel A. Hidalgo<sup>1</sup>, Fernando Carcaboso<sup>1</sup>, Juan J. Blanco  
**2017** ApJ 840 85  
<http://sci-hub.cc/10.3847/1538-4357/aa6c5c>

### **An analysis of interplanetary solar radio emissions associated with a coronal mass ejection**

Vratislav **Krupar**, Jonathan Eastwood, Oksana Kruparova, Ondrej Santolik, Jan Soucek, Jasmina Magdalenic, Angelos Vourlidas, Milan Maksimovic, Volker Bothmer, Niclas Mrotzek, Adam Pluta, David Barnes, Jackie Davies, Juan Carlos Martinez Oliveros, Stuart Bale  
ApJ 823 L5 **2016**



<http://arxiv.org/pdf/1606.04301v1.pdf>

### **Radio triangulation of solar radio emissions: STEREO/Waves measurements**

Vratislav **Krupar**\*1,2, Eastwood Jonathan1, Oksana Kruparova2, Ondrej Santolik2,3, Jan Soucek2, Jasmina Magdalenic4, Vourlidas Angelos5, Milan Maksimovic6, Xavier Bonnin6, Volker Bothmer7, Niclas Mrotzek7, Adam Pluta7, David Barnes8, Jackie Davies8, Juan Carlos Martinez Oliveros9, and Stuart Bale

CESRA Abstract 2016

[http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016\\_prog\\_abs\\_book\\_v1.pdf](http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v1.pdf)

### **CME flux rope and shock identifications and locations: Comparison of white light data, graduated cylindrical shell (GCS) model, and MHD simulations†**

J. M. **Schmidt**, Iver H. Cairns, Hong Xie, O. C. St. Cyr, N. Gopalswamy

JGR 2016

### **The Langmuir waves associated with the 1 December 2013 type II burst**

D. B. **Graham**, Iver H. Cairns

JGR Volume 120, Issue 6 June 2015 Pages 4126–4141

### **The multi-thermal and multi-stranded nature of coronal rain**

P. **Antolin**, **G. Vissers**, **T. M. D. Pereira**, **L. Rouppe van der Voort**, **E. Scullion**

ApJ 2015

<http://arxiv.org/pdf/1504.04418v1.pdf>

### **29 Nov – 1Dec**

### **Type II Radio Emission From Sun To Earth And In The Lower Corona**

Joachim **Schmidt**\*1 and Iver Cairns

CESRA Abstract 2016

[http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016\\_prog\\_abs\\_book\\_v1.pdf](http://cesra2016.sciencesconf.org/conference/cesra2016/pages/CESRA2016_prog_abs_book_v1.pdf)

### **1 Dec –Forbush**

**1 Dec**: A filament eruption in the northwest quadrant began near 19:30 UTC and a partial halo CME was observed in LASCO and STEREO imagery after 21:30 UTC. **304 A.**

### **Magnetic connections across the chromosphere-corona transition region**

**Philip G. Judge**

ApJ 2021

<https://arxiv.org/pdf/2104.07753.pdf>

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

M. J. **Reiner**, **R. J. MacDowall**

*Solar Physics* July 2019, 294:91

[sci-hub.se/10.1007/s11207-019-1476-9](https://doi.org/10.1007/s11207-019-1476-9)

### **The Langmuir waves associated with the 1 December 2013 type II burst**

D. B. **Graham**, Iver H. Cairns

JGR Volume 120, Issue 6 June 2015 Pages 4126–4141

### **1-4 Dec**

### **STEREO Observations of Interplanetary Coronal Mass Ejections in 2007–2016**

L. K. **Jian**1,2, C. T. Russell3,4, J. G. Luhmann5, and A. B. Galvin6,7

2018 ApJ 855 114

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

**2 Dec**, 17:48 – **очень узкий**, северный CME (внутреннее ядро)

**2-3 Dec**

### ICME Evolution in the Inner Heliosphere

**Invited Review**

J. G. **Luhmann**, N. **Gopalswamy**, L. K. **Jian** & N. **Lugaz**

*Solar Physics* volume 295, Article number: 61 (2020) **File**

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

### Sunward-propagating Solar Energetic Electrons inside Multiple Interplanetary Flux Ropes

Raúl **Gómez-Herrero**<sup>1</sup>, Nina Dresing<sup>2</sup>, Andreas Klassen<sup>2</sup>, Bernd Heber<sup>2</sup>, Manuela Temmer<sup>3</sup>, Astrid Veronig<sup>3</sup>, Radoslav Bučik<sup>4,5</sup>, Miguel A. Hidalgo<sup>1</sup>, Fernando Carcaboso<sup>1</sup>, Juan J. Blanco

2017 ApJ 840 85

<http://sci-hub.cc/10.3847/1538-4357/aa6c5c>

**4 Dec** - **Огромная filament eruption** was observed beginning near 21h UTC across the central meridian in the northern hemisphere.

### Eruption of prominence initiated by loss of equilibrium: multipoint observations

P **Vemareddy**, M Syed Ibrahim

MNRAS, Volume 527, Issue 2, January 2024, Pages 1774–1783,

<https://doi.org/10.1093/mnras/stad3323>

<https://academic.oup.com/mnras/article-pdf/527/2/1774/53252392/stad3323.pdf>

**5 Dec** – утром **продолжение** в западной части эрупции волокна 4-ого, **304 A**;  
-- A filament eruption was observed near AR 11909 starting at 20:41 UTC in SDO/AIA imagery. STEREO imagery indicate that there was a CME associated with this event and that it could have an Earth directed component.

**6 Dec**

### Solar Ultraviolet Bursts

**Review**

Peter R. **Young**, Hui Tian, Hardi Peter, Robert J. Rutten, Chris J. Nelson, Zhenghua Huang, .....

*Space Science Reviews* December 2018, 214:120

<https://link.springer.com/content/pdf/10.1007%2Fs11214-018-0551-0.pdf>

### Mass and energy supply of a cool coronal loop near its apex★

Limei **Yan**<sup>1</sup>, Hardi Peter<sup>2</sup>, Jiansen He<sup>1</sup>, Lidong Xia<sup>4</sup> and Linghua Wang<sup>1</sup>

A&A 611, A49 (2018)

<http://sci-hub.tw/https://www.aanda.org/articles/aa/abs/2018/03/aa28436-16/aa28436-16.html>

**7 Dec** – 07:29, M1.2/1N flare in AR 1909 (S16W49), S5~220; наш II тип; wide CME

### A Transient Coronal Sigmoid in Active Region NOAA 11909: Build-up Phase, M-class Eruptive Flare, and Associated Fast Coronal Mass Ejection

Hema **Kharayat**, **Bhuwan Joshi**, **Prabir K. Mitra**, **P. K. Manoharan** & **Christian Monstein**

*Solar Physics* volume 296, Article number: 99 (2021)

<https://link.springer.com/content/pdf/10.1007/s11207-021-01830-4.pdf>

<https://doi.org/10.1007/s11207-021-01830-4>

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

Nishtha **Sachdeva**

Ph.D. **Thesis** 2019

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

### **Early-stage Solar Energetic Particle Acceleration by Coronal Mass Ejection-driven Shocks with Realistic Seed Spectra. I. Low Corona**

Kamen A. **Kozarev**<sup>1</sup>, Maher A. Dayeh<sup>2,3</sup>, and Ashraf Farahat<sup>4</sup>

2019 ApJ 871 65

[sci-hub.tw/10.3847/1538-4357/aaf1ce](http://sci-hub.tw/10.3847/1538-4357/aaf1ce)

### **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](http://sci-hub.se/10.1088/1742-6596/1005/1/012046)

### **Observations of a high-quality quasi-periodic rapidly-propagating wave train using SDO/AIA**

G. **Nistico**, D. J. Pascoe, V. M. Nakariakov

E-print, June 2014; A&A

[http://www2.warwick.ac.uk/fac/sci/physics/research/cfsa/people/nistico/publications/paper\\_wave\\_train.pdf](http://www2.warwick.ac.uk/fac/sci/physics/research/cfsa/people/nistico/publications/paper_wave_train.pdf)

**7-8 Dec** – буря (Dst~71) и форбуш от эрупции 4-ого

**7-13 Dec**

### **Solar Filaments and Interplanetary Magnetic Field Bz**

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

2020 ApJ 897 68

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

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

**8 Dec**

### **Photospheric Flow Field Related to the Evolution of the Sun's Polar Magnetic Patches Observed by Hinode SOT**

Anjali John **Kaithakkal**, **Y. Suematsu**, **M. Kubo**, **Y. Iida**, **D. Shiota**, **S. Tsuneta**

ApJ, 2015

<http://arxiv.org/pdf/1412.8023v1.pdf>

**10-13 Dec**

### **Determination of Differential Emission Measure from Solar Extreme Ultraviolet Images**

Yang **Su**<sup>1,2</sup>, Astrid M. Veronig<sup>3</sup>, Iain G. Hannah<sup>4</sup>, Mark C. M. Cheung<sup>5</sup>, Brian R. Dennis<sup>6</sup>, Gordon D. Holman<sup>6</sup>, Weiqun Gan<sup>1,2</sup>, and Youping Li<sup>1</sup>

2018 ApJL 856 L17

<http://iopscience.iop.org/article/10.3847/2041-8213/aab436/pdf>

**11 Dec**

### **Photospheric Flow Field Related to the Evolution of the Sun's Polar Magnetic Patches Observed by Hinode SOT**

Anjali John **Kaithakkal**, **Y. Suematsu**, **M. Kubo**, **Y. Iida**, **D. Shiota**, **S. Tsuneta**

ApJ, 2015

<http://arxiv.org/pdf/1412.8023v1.pdf>

**12 Dec** - ~03 UT: эрупция SW волокна, небольшой II тип

~05-07 UT: более крупная эрупция SE волокна с длительной ПЭ фазой;

медленно дрейфующий континуум

## Multi-Scale Image Preprocessing and Feature Tracking for Remote CME Characterization

[Oleg Stepanyuk](#), [Kamen Kozarev](#), [Mohamed Nedal](#)

Journal of Space Weather and Space Climate 2022

<https://arxiv.org/pdf/2205.15088.pdf>

## Early-stage Solar Energetic Particle Acceleration by Coronal Mass Ejection-driven Shocks with Realistic Seed Spectra. I. Low Corona

Kamen A. [Kozarev](#)<sup>1</sup>, Maher A. Dayeh<sup>2,3</sup>, and Ashraf Farahat<sup>4</sup>

2019 ApJ 871 65

[sci-hub.tw/10.3847/1538-4357/aaf1ce](https://sci-hub.tw/10.3847/1538-4357/aaf1ce)

## The Coronal Analysis of SHocks and Waves (CASHew) Framework

K. [Kozarev](#), [A. Davey](#), [A. Kendrick](#), [M. Hammer](#), [C. Keith](#)

Journal of Space Weather and Space Climate (SWSC) 2017

<https://arxiv.org/pdf/1710.05302.pdf>

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

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

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

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

15 Dec залимбовый пересвет 22:16 ←16s 8s→ B=46/278=0.17 <0.2 не берём

### 14 Dec

## Forbush Decreases during the DeepMin and MiniMax of Solar Cycle 24

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

XXV European Cosmic Ray Symposium, Turin, Sept. 4-9 2016

2016

<https://arxiv.org/pdf/1612.08900v1.pdf>

## 15 Dec - солнечный ветер и форбуш от КД и/или от эрупции 12-ого CMEs in the Heliosphere: I. A Statistical Analysis of the Observational Properties of CMEs Detected in the Heliosphere from 2007 to 2017 by STEREO/HI-1

[R. A. Harrison](#), [J. A. Davies](#), [D. Barnes](#), [J. P. Byrne](#), [C. H. Perry](#), [V. Bothmer](#), [J. P. Eastwood](#), [P. T. Gallagher](#), [E. K. J. Kilpua](#), [C. Möstl](#), [L. Rodriguez](#), [A. P. Rouillard](#), [D. Odstrcil](#)

Solar Phys.

2018

<https://arxiv.org/ftp/arxiv/papers/1804/1804.02320.pdf>

### 17-22 Dec

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

Suman K. [Dhakal](#)<sup>1</sup> and Jie Zhang<sup>1</sup>

2024 ApJ 960 36

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

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

Dattaraj B. [Dhuri](#)<sup>1,2</sup>, Shamik Bhattacharjee<sup>1</sup>, Shravan M. Hanasoge<sup>1,2</sup>, and Sashi Kiran Mahapatra<sup>1</sup>

2022 ApJ 939 64

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

## Successive Injection of Opposite Magnetic Helicity in Solar Active Region NOAA 11928

P. **Vemareddy**, P. Démoulin  
A&A 597, A104 (2017)  
<https://arxiv.org/pdf/1611.00699v1.pdf>  
<http://www.aanda.org/articles/aa/pdf/2017/01/aa29282-16.pdf>

**19 Dec** – 23:21 – M3.5 **вспышка**; **пересвет** на **STEREO-B**:  $B=18^*2/276=0,13$

**19 Dec** – 23:19: относительно короткая M3.5 **вспышка** в AR 11931 [S14E68]

### Relation of Coronal Rain Originating from Coronal Condensations to Interchange Magnetic Reconnection

Leping **Li**<sup>1,2,3</sup>, Hardi Peter<sup>4</sup>, Lakshmi Pradeep Chitta<sup>4</sup>, and Hongqiang Song<sup>2</sup>  
2020 ApJ 905 26  
<https://doi.org/10.3847/1538-4357/abc68c>

### Analytical solutions of continuity equation for joint collisional and Ohmic energy losses and their effects on hard X-ray emission. II. Mixed energy losses

**Zharkova** V.V. and Dobranskis R.R.  
MNRAS 2016

<http://mnras.oxfordjournals.org/content/early/2016/03/07/mnras.stw500.full.pdf?keytype=ref&ijkey=zcVKoDhBj8zNW7o>

**20 Dec** – 12:16 – M1.6 **пересвет**  $B=24^*2/276=0,17 \leftarrow 16s \quad 8s \rightarrow B=24/276=0,087$

**23 Dec** – 00:16 – M1.3 **пересвет**  $A=14^*2/313=0,09 \leftarrow 16s \quad 8s \rightarrow A=14/313=0,045$   
09:06 – M1.6 **вспышка**; **пересвет** на **STEREO-A**:  $A=19^*2/313=0,12$

**23 Dec**

### An Observational Revisit of Stationary Type IV Solar Radio Bursts

**Maoshui Lv**, **Yao Chen**, **V. Vasanth**, **Mohd Shazwan Radzi**, **Zamri Zainal Abidin** & **Christian Monstein**  
*Solar Physics* volume 296, Article number: 38 (2021)  
<https://link.springer.com/content/pdf/10.1007/s11207-021-01769-6.pdf>

**24 Dec**

### Fitting and Reconstruction of Thirteen Simple Coronal Mass Ejections

**Nada Al-Haddad**, **Teresa Nieves-Chinchilla**, **Neel P. Savani**, **Noe Lugaz**, **Iliia I. Roussev**  
*Solar Phys.* 2018  
<https://arxiv.org/pdf/1804.02359.pdf>

**25 Dec**

### [http://solar.gmu.edu/heliophysics/index.php/The\\_ISEST\\_Event\\_List](http://solar.gmu.edu/heliophysics/index.php/The_ISEST_Event_List)

### On Solar Recurrent Coronal Jets: Coronal Geysers as Sources of Electron Beams and Interplanetary Type-III Radio Bursts

Alin Razvan **Paraschiv** and Alina Donea  
2019 ApJ 873 110  
<https://doi.org/10.3847/1538-4357/ab04a6>  
<https://arxiv.org/pdf/1903.04682.pdf>

**26 Dec** – небольшие плавные протоны от далёкой вспышки на обратной стороне  
A large **back-sided** hyder flare which began at 02:46 UTC (located to the south of the southernmost part of a large coronal hole) was associated with **an increase in proton levels and a large CME**.

## The effect of stream interaction regions on ICME structures observed in longitudinal conjunction

Reka M. [Winslow](#), [Camilla Scolini](#), [Noé Lugaz](#), [Antoinette B. Galvin](#)

ApJ 2021

<https://arxiv.org/pdf/2105.10602.pdf>

## Long-lasting injection of solar energetic electrons into the heliosphere

N. [Dresing](#)<sup>1</sup>, R. Gómez-Herrero<sup>2</sup>, B. Heber<sup>1</sup>, A. Klassen<sup>1</sup>, M. Temmer<sup>3</sup> and A. Veronig<sup>3</sup>

A&A 613, A21 (2018)

<https://www.aanda.org/articles/aa/pdf/2018/05/aa31573-17.pdf>

<http://sci-hub.tw/https://www.aanda.org/articles/aa/abs/2018/05/aa31573-17/aa31573-17.html>

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

Miikka [Paassilta](#), [Athanasios Papaioannou](#), [Nina Dresing](#), [Rami Vainio](#)...

*Solar Physics* April 2018, 293:70

<https://link.springer.com/content/pdf/10.1007%2Fs11207-018-1284-7.pdf>

**27 Dec**

## Detection of decayless oscillations in solar transition region loops L4

Yuhang [Gao](#), Zhenyong Hou, Tom Van Doorselaere and Mingzhe Guo

A&A Letter Volume 681, January 2024

<https://doi.org/10.1051/0004-6361/202348702>

<https://www.aanda.org/articles/aa/pdf/2024/01/aa48702-23.pdf>

## Dynamics in the transition region beneath active region upflows viewed by IRIS

[Zhenghua Huang](#), [Lidong Xia](#), [Hui Fu](#), [Zhenyong Hou](#), [Ziyuan Wang](#)

ApJ 2021

<https://arxiv.org/pdf/2107.01577.pdf>

## Velocity Response of the Observed Explosive Events in the Lower Solar Atmosphere: I. Formation of the Flowing Cool Loop System

A.K. [Srivastava](#), [Yamini K. Rao](#), [P. Konkol](#), [K. Murawski](#), [M. Mathioudakis](#), [Sanjiv K. Tiwari](#), [E. Scullion](#), [J.G. Doyle](#), [B.N. Dwivedi](#)

ApJ 2020

<https://arxiv.org/pdf/2004.02775.pdf>

## Plasma flows in the cool loop systems

Yamini K. [Rao](#), [Abhishek K. Srivastava](#), [Pradeep Kayshap](#), [Klaus Wilhelm](#), [Bhola N. Dwivedi](#)

ApJ 2019

<https://arxiv.org/pdf/1902.05237.pdf>

## Cool transition region loops observed by the Interface Region Imaging Spectrograph

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

ApJ 2015

<http://arxiv.org/pdf/1507.07594v1.pdf>

**28 Dec** - MINOR RADIATION STORM IN PROGRESS после 18 UT: Energetic **protons** (~20 pfu) are swarming around Earth following a magnetic eruption near the western limb of the sun: movie

([http://www.spaceweather.com/images2013/28dec13/cme\\_anim.gif?PHPSESSID=t8ut41e6735sr1u37gshnsb771](http://www.spaceweather.com/images2013/28dec13/cme_anim.gif?PHPSESSID=t8ut41e6735sr1u37gshnsb771)).

**Примерно в это же время (18:02) C9.3/SN вспышка в AR 1956 (S18E07)**

**Statistical analysis of circular-ribbon flares**

[Yanjie Zhang](#), [Qingmin Zhang](#), [Dechao Song](#), [Shuting Li](#), [Jun Dai](#), [Zhe Xu](#), [Haisheng Ji](#)  
Astrophysical Journal Supplement Series 2022  
<https://arxiv.org/pdf/2203.12819.pdf>

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

[Leon Ofman](#), [Tongjiang Wang](#)  
ApJ 2021  
<https://arxiv.org/pdf/2111.10696.pdf>

**Determination of transport coefficients by coronal seismology of flare-induced slow-mode waves: Numerical parametric study of 1D loop model**

Tongjiang [Wang](#), [Leon Ofman](#)  
ApJ 2019  
<https://arxiv.org/pdf/1909.10910.pdf>

**A Survey of Changes in Magnetic Helicity Flux on the Photosphere During Relatively Low Class Flares**

Yi [Bi](#), [Ying D Liu](#), [Yanxiao Liu](#), [Jiayan Yang](#), [Zhe Xu](#), [Kaifan Ji](#)  
ApJ 2018  
<https://arxiv.org/pdf/1808.04591.pdf>

**Effect of transport coefficients on excitation of flare-induced standing slow-mode waves in coronal loops**

[Tongjiang Wang](#), [Leon Ofman](#), [Xudong Sun](#), [Sami K Solanki](#), [Joseph M Davila](#)  
ApJ 2018  
<https://arxiv.org/pdf/1805.03282.pdf>

**The Wind/EPACT proton event catalog (1996-2016)**

Rositsa [Miteva](#), [Susan W. Samwel](#), [Marcus V. Costa-Duarte](#)  
Solar Phys. 2018  
<https://arxiv.org/pdf/1801.00469.pdf> File

**Evidence of thermal conduction suppression in hot coronal loops: Supplementary results**

Tongjiang [Wang](#), Leon Ofman, Xudong Sun, Elena Provornikova, Joseph M. Davila  
Proceedings of IAUS 320, 2015  
<http://arxiv.org/pdf/1510.02750v1.pdf>

**Evidence of thermal conduction suppression in a solar flaring loop by coronal seismology of slow-mode waves**

Tongjiang [Wang](#), Leon Ofman, [Xudong Sun](#), [Elena Provornikova](#), [Joseph M. Davila](#)  
ApJL 2015  
<http://arxiv.org/pdf/1509.00920v1.pdf>

**28-30 Dec**

**The effect of stream interaction regions on ICME structures observed in longitudinal conjunction**

Reka M. [Winslow](#), [Camilla Scolini](#), [Noé Lugaz](#), [Antoinette B. Galvin](#)  
ApJ 2021  
<https://arxiv.org/pdf/2105.10602.pdf>

**29 Dec** – A filament eruption was observed beginning at 06:39 UTC to the south of AR 11938.

-- 07:56 M3.1/1N flare в той же AR 1956 (S18E01), S5~180 без скачка в протонах

### The Sun's Non-Potential Corona over Solar Cycle 24

[Anthony R. Yeates](#)

Solar Phys. 2024

<https://arxiv.org/pdf/2405.14322>

### Energy Partition in Four Confined Circular-Ribbon Flares

[Z. M. Cai](#), [Q. M. Zhang](#), [Z. J. Ning](#), [Y. N. Su](#), [H. S. Ji](#)

Solar Phys. 2021

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

**30 Dec** **залимбовый пересвет** 20:16  $\leftarrow$  16s 8s  $\rightarrow$   $B=40/277=0.14$  **<0.2 не берём**

Рядом меньше

**31 Dec** - New region S2976 [S07E86] produced a major flare. C5+ flare: long duration C8.8 peaking at 11:50 UT

- 21:58 UT, sunspot AR1936 (S16W35) erupted, producing **a strong M6/2N-class flare**, корональная волна, **304 A**, западная всышка с **S5~260, без метров и без протонов**.

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

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

ApJ 2024

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

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

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

Brief Report in Frontiers in Astronomy and Space Sciences 2023

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

### A Study of Pre-Flare Solar Coronal Magnetic Fields: Magnetic Flux Ropes

Aiyang [Duan](#), [Chaowei Jiang](#), [Wen He](#), [Xueshang Feng](#), [Peng Zou](#), [Jun Cui](#)

ApJ 2019

<https://arxiv.org/pdf/1908.08643.pdf>

### Getting it all from spectra! Measuring velocities in the early stages of an eruption using the wide slot data from Hinode EIS

Louise [Harra](#), George Doschek, Sarah Matthews, Harry Warren, Len Culhane, Magnus Woods  
Hinode/EIS Nugget Jan 2018

[http://solarb.mssl.ucl.ac.uk/SolarB/nuggets/nugget\\_2018jan.jsp](http://solarb.mssl.ucl.ac.uk/SolarB/nuggets/nugget_2018jan.jsp)

### Disintegration of an Eruptive Filament via Interactions with Quasi-Separatrix Layers

Rui [Liu](#), [Jun Chen](#), [Yuming Wang](#)

SCIENCE CHINA Physics, Mechanics & Astronomy 2017

<https://arxiv.org/pdf/1712.02901.pdf>

### Measuring Velocities in the Early Stage of an Eruption: Using "Overlappogram" Data from Hinode EIS

Louise K. [Harra](#)<sup>1</sup>, Hirohisa Hara<sup>2</sup>, George A. Doschek<sup>3</sup>, Sarah Matthews<sup>1</sup>, Harry Warren<sup>3</sup>, J. Leonard Culhane<sup>1</sup>, and Magnus M. Woods<sup>1</sup>

2017 ApJ 842 58



<http://sci-hub.cc/10.3847/1538-4357/aa7411>

**Magnetic Properties of Solar Active Regions that Govern Large Solar Flares and Eruptions**

Shin **Toriumi**, Carolus J. Schrijver, Louise K. Harra, Hugh Hudson, Kaori Nagashima

ApJ **2016**

<https://arxiv.org/pdf/1611.05047v1.pdf>

**Observations of Photospheric Vortical Motions During the Early Stage of Filament Eruption**

Sajal Kumar **Dhara**, B. Ravindra, Ravinder Kumar Banyal

Solar Phys. **2014**

<http://arxiv.org/pdf/1410.3592v1.pdf>