MLSO Publications

**2014: (9 as of Jan 21, 2014)**

**COMP**

Bak-Steslicka, Urszula; Gibson, Sarah E., Fan, Yuhong, Bethge, Christian, Forland, Blake, Rachmeler, Laurel A., (2014), The spatial relation between EUV cavities and linear polarization signatures, in: Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp 395-396.

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Chmielewski, P., Srivastava, A., Murawski, K. & Musielak, Z., (2014), Impulsively Generated Linear and Non-Linear Alfvén Waves in the Coronal Funnels, Acta Physica Polonica, V 125, No. 1, pp. 158-164, DOI: 10.12693/APhysPolA.125.158

Forland, B., Gibson, S., Dove, J. & Kucera, T., (2014), The Solar physics FORWARD codes: Now with widgets!, in: Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 414-415

Gibson, Sarah, ‘ Magnetism and the Invisible Man: The mysteries of coronal cavities, (2014), in: Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 139-146

Schwartz, P.; Ambroz, J.; Gömöry, P.; Kozák, M.; Kučera, A.; Rybák, J.; Tomczyk, S.; Sewell, S.; Aumiller, P.; Summers, R.; Sutherland, L.; Watt, A., Coronal Multi-Channel Polarimeter at the Lomnicky Peak Observatory, (2014), in: Nature of Prominences and their role in Space Weather, Proceedings of the International Astronomical Union, IAU Symposium, Volume 300, pp. 521-522

**Mk4:**

Goryaev, F., Slemzin, V., Vainshtein, L. & Williams, D. R. Study of EUV emission and properties of a coronal streamer from PROBA2/SWAP, Hinode/EIS and Mauna Loa Mk4 observations. (2014), Astrophys. J., V 781, p 100-113, DOI: 10.1088/0004-637X/781/2/100

Xue, Z., Yan, X., Qu, Z. & Zhao, L. Downflows-induced brightening following a filament eruption. (2014), New Astronomy, V 26, pp 23-32, DOI: 10.1016/j.newast.2013.04.005

**PICS Halpha:**

Xue (see Mk4 above; paper uses Mk4 and Halpha)

Karachik, N. V. & Pevtsov, A. A. Properties of Magnetic Neutral Line Gradients and Formation of Filaments. Solar Physics 289, 821-830 (2014).

**PSPT:**

Thuillier, G. et al. The Solar Irradiance Spectrum at Solar Activity Minimum Between Solar Cycles 23 and 24. Solar Physics, 1-28 (2014).

**2013 (38 as of Jan 21, 2014)**

**COMP:**

Bak-Steslicka, U. et al. The Magnetic Structure of Solar Prominence Cavities: New Observational Signature Revealed by Coronal Magnetometry. (2013), Astrophys. J. Lett., V770, L28, DOI: 10.1088/2041-8205/770/0/2/L28

de la Cruz Rodríguez, J., De Pontieu, B., Carlsson, M. & Rouppe van der Voort, L. H. M. Heating of the Magnetic Chromosphere: Observational Constraints from Ca II ?8542 Spectra. The Astrophysical Journal Letters 764, L11 (2013).

Forland, B., Gibson, S., Dove, J., Rachmeler, L. & Fan, Y. Coronal Cavity Survey: Morphological Clues to Eruptive Magnetic Topologies. Solar Physics 288, 603-615 (2013).

Hood, A. W. et al. Damping of kink waves by mode coupling. I. Analytical treatment. Astronomy and Astrophysics 551, 39 (2013).

Judge, P. G., Habbal, S. & Landi, E. From Forbidden Coronal Lines to Meaningful Coronal Magnetic Fields. (2013). , Solar Phys. V 288, 467J, DOI: 10.1007/s11207-013-0309-5

Komm, R., De Moortel, I., Fan, Y., Ilonidis, S. & Steiner, O. Sub-photosphere to solar atmosphere connection. Space Science Reviews, 1-33 (2013).

McIntosh, S. W. et al. The Evolving Magnetic Scales of the Outer Solar Atmosphere and Their Potential Impact on Heliospheric Turbulence. arXiv preprint arXiv:1311.2538 (2013).

Morton, R., Verth, G., Hillier, A. & Erdélyi, R. The generation and damping of propagating MHD kink waves in the solar atmosphere. arXiv preprint arXiv:1310.4650 (2013).

Pascoe, D. J., Hood, A. W., De Moortel, I. & Wright, A. N. Damping of kink waves by mode coupling. II. Parametric study and seismology. Astronomy and Astrophysics 551, 40 (2013).

Rachmeler, L. A., Gibson, S. E., Dove, J. B., DeVore, C. R. & Fan, Y. Polarimetric Properties of Flux-Ropes and Sheared Arcades in Coronal Prominence Cavities. (2013), Solar Phys., V 288, pp 617-636, DOI: 10.1007/211207-013-0325-5

Rachmeler, L. A., Platten, S. J., Bethge, C., Seaton, D. B. & Yeates, A. R. Observations of a Hybrid Double-Streamer/Pseudostreamer in the Solar Corona. arXiv preprint arXiv:1312.3153 (2013).

Threlfall, J., De Moortel, I., McIntosh, S. & Bethge, C. First Comparison of Wave Observations from CoMP and AIA/SDO. (2013), Astron. & Astrophys., V 556, 124T, 12 pp., DOI: 10.1051/0004-6361/201321782

Tian, H. et al. Observations of Coronal Mass Ejections with the Coronal Multichannel Polarimeter. Solar Physics, 1-14 (2013).

Topchiyska, R. V.; Zahariev, N. I., (2013), Self consistent 1D numerical calculation of the temperature profile of solar corona heated by Alfvén waves, SPACE PLASMA PHYSICS: Proceedings of the 4th School and Workshop on Space Plasma Physics. AIP Conference Proceedings, Volume 1551, pp. 135-149

Verwichte, E., Van Doorsselaere, T., White, R. S. & Antolin, P. Statistical seismology of transverse waves in the solar corona. Astronomy & Astrophysics (2013).

**MK4:**

Bak-Steslicka, U., Kolomanski, S. & Mrozek, T. Coronal Mass Ejections Associated with Slow Long Duration Flares. Solar Physics, 1-13 (2013).

Chen, Y. A review of recent studies on coronal dynamics: Streamers, coronal mass ejections, and their interactions. Chinese Science Bulletin, 1-26 (2013).

Cho, K.-S., Gopalswamy, N., Kwon, R.-Y., Kim, R.-S. & Yashiro, S. A High-frequency Type II Solar Radio Burst Associated with the 2011 February 13 Coronal Mass Ejection. The Astrophysical Journal 765, 148 (2013).

(uses Mk4 & Mk3):

Ciaravella, A., Webb, D. F., Giordano, S. & Raymond, J. C. Bright Ray-like Features in the Aftermath of CMEs: White Light vs UV Spectra. (2013), Astrophys. J., V766, pp65-78, DOI: 10.1088/004-637X/766/1/65

Eselevich, V. G., Eselevich, M. V. & Zimovets, I. V. Blast-wave and piston shocks connected with the formation and propagation of a coronal mass ejection. Astronomy Reports 57, 142-151 (2013).

Uses Mk4 + Mk3 + PICS:

Eselevich, V. & Eselevich, M. The role of rising magnetic tubes in the formation of impulsive coronal mass ejections. Astronomy Reports 57, 860-871 (2013).

Feng, S. et al. Diagnostics on the Source Properties of a Type II Radio Burst with Spectral Bumps. The Astrophysical Journal 767, 29 (2013).

Gopalswamy, N. et al. Height of shock formation in the solar corona inferred from observations of type II radio bursts and coronal mass ejections. Advances in Space Research (2013).

Kim, I., Popov, V., Lisin, D. & Osokin, A. Observations of neutral hydrogen in the corona. Geomagnetism and Aeronomy 53, 901-903 (2013).

Uses Mk4 & Mk3:

McComas, D. et al. Weakest Solar Wind of the Space Age and the Current. The Astrophysical Journal 779, 2 (2013).

Morgan, H., Jeska, L. & Leonard, D. The Expansion of Active Regions into the Extended Solar Corona. The Astrophysical Journal Supplement Series 206, 19 (2013).

Uses Mk4 & Mk3:

Yuan, D. Compressive magnetohydrodynamic waves in the solar atmosphere, University of Warwick, (2013) Thesis URL: <http://www2.warwick.ac.uk/fac/sci/physics/research/cfsa/people/pastmembers/yuan/projects/ding_yuan_thesisplan.pdf>

Uses Mk4 & Mk3)

Zuccarello, F. et al. Solar activity and its evolution across the corona: recent advances. Journal of Space Weather and Space Climate 3, A18, 45pp. (2013), DOI: 10.1051/swsc/2013039

**Mk3:**

Eselevich, Role of rising magnetic flux tubes … (see Mk4)

Mancuso, S. & Garzelli, M. Coronal magnetic field strength from Type II radio emission: complementarity with Faraday rotation measurements. (2013), Astronomy and Astrophys., V 560, id.L1, 4pp, DOI: 10.1051/0004-6361/201322645

McComas et al. (see Mk4)

Shen, F.; Feng, X.; Xiang, C.; Wu, S. T. (2013), Numerical Modeling of Space Plasma Flows (ASTRONUM2012). Proceedings of a 7th International Conference held at Big Island, Hawaii, USA June 25-29, 2012. Edited by N.V. Pogorelov, E. Audit and G.P. Zank. San Francisco: Astronomical Society of the Pacific, p.172

Yuan (see Mk4)

Zuccarello (see Mk4)

**PICS Halpha**

Eselevich and Eselevich (see Mk4)

Uses PICS & CHIP:

Francile, C., Costa, A., Luoni, M. L. & Elaskar, S. Ha Moreton waves observed on December 06, 2006. A 2D case study. Astronomy and Astrophysics 552, 3 (2013)

Grechnev, V., Kuzmenko, I., Uralov, A., Chertok, I. & Kochanov, A. Microwave Negative Bursts as Indications of Reconnection between Eruptive Filaments and Large-Scale Coronal Magnetic Environment. (2013), Publications of the Astronomical Society of Japan, V65, (sp1): S10 9, DOI: 10.1093/pasj/65.sp1.S10

Hao, Q., Fang, C. & Chen, P. F. Developing an Advanced Automated Method for Solar Filament Recognition and Its Scientific Application to a Solar Cycle of MLSO Ha Data. Solar Physics, 1-20 (2013).

Song, H. et al. A Study of Fast Flareless Coronal Mass Ejections. The Astrophysical Journal 773, 129 (2013).

Tripathi, D., Reeves, K. K., Gibson, S. E., Srivastava, A. & Joshi, N. C. SDO/AIA Observations of a Partially Erupting Prominence. The Astrophysical Journal 778, 142 (2013).

**PSPT**

Ermolli, I., , K. Matthes, T. Dudok de Wit, N. A. Krivova, K. Tourpali, M. Weber, Y. C. Unruh, L. Gray,U. Langematz, P. Pilewskie, E. Rozanov, W. Schmutz, A. Shapiro, S. K. Solanki, and T. N. Woods, Recent variability of the solar spectral irradiance and its impact on

climate modelling, (2013), Atmos. Chem. Phys., 13, pp3945-3977, [www.atmos-chem-phys.net/13/3945/2013](http://www.atmos-chem-phys.net/13/3945/2013), DOI: 10.5194/acp-13-3945-2013

**CHIP**

Francile et al. (see PICS)

**K-COR**

Hou, J., de Wijn, A. G. & Tomczyk, S. Design and measurement of the Stokes polarimeter for the COSMO K-coronagraph. The Astrophysical Journal 774, 85 (2013).