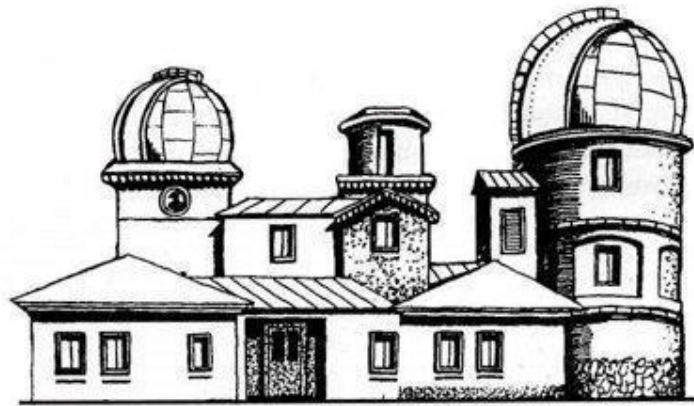


25th SOLAR PHYSICS MEETING

Hurbanovo, Slovakia, 20 – 22 October, 2020

Slovak Central Observatory Hurbanovo



Solar Section

**Slovak
Astronomical
Society**
at Slovak Academy of Sciences

Solar Section



PROGRAMME

20 October 2020, Tuesday

9.00 – Opening Ceremony

Chairperson: J. Laštovička

9.10 – 10.30:

Solar Orbiter – European mission to wards the Sun (*review talk*)

P. Heinzel

The nature of sunspots

*J. Jurčák, N. Bello González, R. Schlichenmaier, R. Rezaei, M. Schmassmann,
M. García Rivas*

Vertical magnetic fields on evolving pores

M. García-Rivas, J. Jurčák, N. Bello González

10.30 – 10.50: Break

10.50 – 11.50:

Wavelet Separation Method (WASEM) and its use in solar research

H. Mészárosová

Magnetic field reconnection forced by a passing fast sausage MHD wave

H. Mészárosová, P. Gömöry

Dynamics and magnetism of selected phenomena in the atmosphere of the Sun

*M. Benko, P. Gömöry, C. Kuckein, H. Balthasar, A. Asensio Ramos,
S. J. González Manrique*

11.50 – 13.00: Lunch Break

Chairperson: E. Džifčáková

13.00 – 14.20:

Analysis of the first two principal components of the solar magnetic field

P. Kalenda

Great minima and maxima of the solar activity

L. Pastorek

Chromospheric heating by acoustic waves I – Models

M. Sobotka, V. Abbasvand, P. Heinzel, M. Švanda a J. Jurčák

Chromospheric heating by acoustic waves II – Middle and upper chromosphere

V. Abbasvand, M. Sobotka, M. Švanda, C. Denker a J. Koza



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14.20 – 14.40: Break

14.40 – 15.40:

A study of Kelvin-Helmholtz instability in solar partially ionised magnetised jets

S. Lomineishvili, T. Zaqarashvili, P. Gömöry, D. Kuridze, D. Tsiklauri

Study of the white-light emission during the X9.3 flare on 6 September 2017

L. Mravcová

Spatial distribution of energy partitioning in a cold solar flare

G. G. Motorina, G. D. Fleishman, E. P. Kontar

15.40 – 16.00: Presentation of posters

News in solar research with ALMA

M. Bárta a tým českého uzlu Evropského Regionálního Centra ALMA

Study of turbulent flow around a circular cross-section obstacle

S. Belov, P. Jelínek

New control system for radiotelescopes RT2 and RT5 in Ondřejov

A. Koval, J. Krejcar, K. Jiříčka, M. Bárta

Geomagnetic Dst index and its significance for geomagnetic activity modeling

M. Revallo, F. Valach, P. Hejda

21 October 2020, Wednesday

9.00 – 10.20:

Chairperson: *I. Dorotovič*

Advances in (not solely solar) radio astronomy (review talk)

M. Bárta & the Czech EU ALMA Regional Center Team

Chairperson: *M. Bárta*

Spectral break and spectral bump in two successive type II solar radio bursts

A. Koval, M. Karlický, M. Bárta, A. Stanislavsky, V. Dorovskyy

A Remarkable Confined Flare Accompanied by Rarely Observed Slowly Positively Drifting Bursts in Radio Frequencies 0.8-2.0 GHz

A. Zemanová, M. Karlický, J. Kašparová, J. Dudík

10.20 – 10.40: Break



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10.40 – 11.40:

Drift of footpoints of the eruptive magnetic flux rope

J. Dudík, J. Lörinčík, G. Aulanier, A. Zemanová

Diagnostics of the kappa-distribution from EUV solar spectra

E. Dzifčáková, J. Dudík, J. Lörinčík, A. Zemanová

Non-LTE modelling of a small-scale arch filament located in the active region

*P. Schwartz, P. Heinzel, H. Balthasar, C. Kuckein, M. Verma, C. Denker,
S. J. Gonzales Manrique,*

11.40 – 13.00: Lunch Break

Chairperson: A. Kučera

13.00 – 14.20:

Spectroscopy and Differential Emission Measure Diagnostics of a Coronal Dimming Associated with a Fast Halo CME

P. Gömöry, A. Veronig, K. Dissauer, M. Temmer, K. Vanninathan

Arch Filament Systems and their evolution through the layers of the solar atmosphere

*S. J. González Manrique, C. Kuckein, A. Pastor Yabar, A. Diercke, M. Collados,
P. Gömöry, S. Zhong, Y. Hou, and C. Denker*

On average rotational velocity of the solar corona

I. Dorotovič, M. Rybanský

14.20 – 14.40: Break

14.40 – 16.20:

Research, engineering and educational activities at the Department of Space Physics, Institute of Experimental Physics SAS (review talk)

*Š. Mackovjak, J. Baláž, P. Bobík, R. Langer, M. Kolárik, B. Pastirčák, M. Putiš,
I. Strhárský, S. Štefánik, J. Štetiarová, S. Amrich, M. Harman, M. Varga*

How did the historical observatory Clementinum record magnetic storms?

F. Valach, P. Hejda, M. Revallo

Influence of solar wind on the electric field in the ionosphere and Earth's atmosphere

J. Chum

Re-analysis of physical parameters in the stratosphere

M. Kozubek



22 October 2020, Thursday

Chairperson: F. Valach

9.00 – 10.20

Solar activity and climate change (review talk)

A. Kučera

Is the relationship between ionospheric parameters and indices of solar activity stable?

J. Laštovička

Which solar index is the best for long-term study of the ionosphere?

J. Laštovička

10.20 – 10.30: Break

10.30 – 12.00:

A survey and development of optical solar observations in Ondřejov (review talk)

P. Kotrč

Observations of the Sun in Ondřejov before 1956

M. Pavelková

Doppler velocity drift in solar prominences

M. Zapiór

12.00 – Closing Discussion



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