

ISWI School Report

21 – 27 August 2011, Tatranská Lomnica, Slovakia

(http://stara.suh.sk/id/iswi/summer_school)

Ivan Dorotovič and Nat Gopalswamy

Scientific Program

- A. Kučera Centre of Space Research: Space Weather Influences
- P. Heinzel The Sun from Space
- W. Dziembowski Solar Interior
- R. Erdélyi Fundamentals of MHD in Space Research
- E. D. Lopez Solar Dynamo Processes,
 Solar Wind Earth's Magnetosphere Coupling
- M. Sobotka Solar Photosphere
- J. Koza Solar Chromosphere
- J. Dudík Solar Corona and the Inner Heliosphere
- I. Dorotovič ISWI in Slovakia
- M. Bárta Reconnection Processes in the Sun and the Inner Heliosphere
- N. Gopalswamy Solar Eruptions, CMEs and Space Weather;

CMEs / Data Analysis

- D. Odstrčil Numerical Heliospheric Code ENLIL and Space Weather Predictions
- R. Huth Effects of Solar Activity on Earth's Climate
- D. J. F. Maia Solar Energetic Particles, Solar Radio Emission Processes
- D. Pérez-Suárez The HELiophysics Integrated Observatory (HELIO)

Hands-on with HELIO

- K. Kudela Cosmic Rays in Relation to Space Weather
- J. Lastovička Long-term Trends in the Ionosphere and Upper Atmosphere

Scientific Program ...

- A. Hanslmeier Space Weather on Exoplanets
- Ch. Amory-Mazaudier Electric Currents in the Earth's Environment and Impacts on Nex Technologies
- R.A. Ribeiro Computer Intelligence Techniques in Time Series Analysis
- F. Valach Neural Networks as Universal Approximators
- F. Kamalabadi Inverse Problems and Methods in Space Data Analysis, Assimilation, and Imaging
- J.M. Davila Scientific Instruments for Space Exploration
- M. Danielides Sudden Ionospheric Disturbances Detected by Ground Methods
- F. Jansen International Space Weather Status: towards Space Situational Awareness





Lecturers

- Christine Amory-Mazaudier, LPP/CNRS-Ecole Polytechnique-UPMC, Saint-Maur-Des-Fossés, France
- Miroslav Bárta, Astronomical Instritute of AS CR, Ondřejov, Czech Republic
- Michael Danielides, Institute of Communications and Navigation, German Aerospace Center (DLR), Neustrelitz, Germany
- Joseph M. Davila, NASA/GSFC, Geenbelt, USA and ISWI
- Ivan Dorotovič, Slovak Central Observatory, Hurbanovo, Slovakia
- Jaroslav Dudík, Department of Astronomy, Physics of the Earth and Meteorology, FMPI, Comenius University, Bratislava, Slovakia
- **Wojciech A. Dziembowski**, Astronomical Observatory, Warsaw University, Warsaw, Poland
- **Robert Erdélyi**, Department of Applied Mathematics, University of Sheffield, Sheffield, UK
- Nat Gopalswamy, NASA/GSFC, Geenbelt, USA and ISWI
- **Arnold Hanslmeier**, Institute of Geophysics, Astrophysics and Meteorology, University of Graz, Graz, Austria
- Petr Heinzel, Astronomical Instritute of AS CR, Ondřejov, Czech Republic

Lecturers ...

Radan Huth, Institute of Atmospheric Physics of AS CR, Prague, Czech Republic **Frank Jansen**, Institute of Space Systems, German Aerospace. Center (DLR), Bremen, Germany

Farzad Kamalabadi, National Science Foundation, Arlington, USA
Július Koza, Astronomical Instituite of SAS, Tatranská Lomnica, Slovakia
Aleš Kučera, Astronomical Instituite of SAS, Tatranská Lomnica, Slovakia
Karel Kudela, Institute of Experimental Physics of SAS, Košice, Slovakia
Jan Laštovička, Institute of Atmospheric Physics of AS CR, Prague, Czech Republic
Ericson D. Lopez, Quito Astronomical Observatory, National Polytechnic School,
Quito, Ecuador

Dalmiro J. F. Maia, Astronomical Observatory, University of Porto, Porto, Portugal **Dušan Odstrčil**, NASA/GSFC, Greenbelt and George Mason University, Fairfax, USA **David Pérez-Suárez**, Trinity College, Dublin, Ireland

Rita A. Ribeiro, UNINOVA-CA3, Science and Technology Faculty, New University of Lisbon, Caparica, Portugal

Michal Sobotka, Astronomical Instritute of AS CR, Ondřejov, Czech Republic Fridrich Valach, Geophysical Institute of SAS – Geomagnetic Observatory, Hurbanovo, Slovakia

Total lecturers: **25** from 11 countries

Students

- Argentina 1
- Armenia 1
- Austria 1
- Brazil 1
- Bulgaria 1
- Croatia 2
- Czech Republic 4
- Ecuador 1
- Egypt 1
- Germany 4
- Greece 4
- China 1
- India 2

- Ireland 1
- Italy 1
- Kenya 1
- Korea 1
- Mexico 1
- Nigeria 1
- Poland 4
- Portugal 1
- Romania 4
- Slovakia 2
- Spain 1
- Turkey 1
- Ukraine 3

46 students from 26 countries

Logistics and technical support 5

Total participants: 76



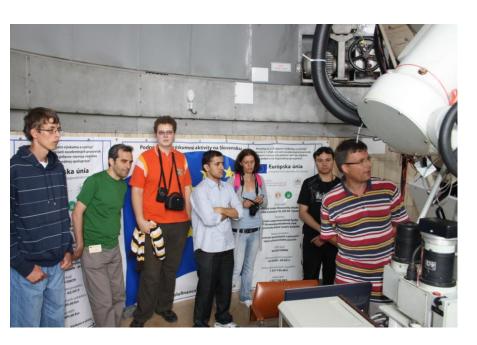
Participants

Excursion to the Lomnický Peak Observatory

24 August 2011









Public Relations

• Short news about the Summer School at the website of the Slovak Academy of Sciences: <u>in English</u> and <u>in Slovak</u>

• Interview with Ľubica Drutarovská for the Slovak Radio on Tuesday, 23 August 2011

Article in a local biweekly newspaper of High Tatras: <u>in Slovak</u>

Photo Gallery of the Summer School

Sponsors

- The school was hosted by the Centre of Excellence 'Centre of Space Research: Space Weather Influences' [Astronomical Institute of the Slovak Academy of Sciences (AI SAS), Tatranská Lomnica, Institute of Experimental Physics of SAS in Košice (IEP SAS), and Institute of Physics of UPJ Š in Košice (IP UPJŠ)] and the **Slovak Central Observatory** (SCO), Hurbanovo.
- Sponsored by NASA, SCOSTEP/CAWSES-II, ICTP, ESA, SPS, EADS-ASTRIUM, AEF



2011 ISWI Summer School in Space Science

August 21-27, 2011, Astronomical Institute of the SAS, Tatranská Lomnica, Slovakia



















Feedback

Great thanks for excellent school organization! I liked it very much. Participation in this summer school helped me a lot in understanding my future direction in science and expanded my knowledge in area of solar physics.

Antonina Klyuyeva (Ukraine)

Thank you for providing me the opportunity to participate in the ISWI summer school held in Tatranska Lomnica. I learned many things about Solar Physics and Space Weather and I am now seriously considering to start my career as a Solar physicist. Thank you for the support from EADS-ASTRIUM.

Alin Razvan Paraschiv (Romania)

Post-School

Lectures are on Summer School website in the section of the <u>Scientific Program</u>

• Link to lectures to be put on ISWI website
and on SCOSTEP/CAWSES II website