

3rd SOLARNET Workshop "Polarization in the Sun, the Solar System, and Beyond" Granada, 25–28 May 2015

PRESENTATIONS

Monday 25th of May

09:00-09:15 Welcome address - IAA Director

Keynote Lecture

09:15-10:00 Polarization in astrophysics - a personal selection - Sami K. Solanki

Session 1: Instrumentation (ground, space, laboratory)

10:00-10:35 [Solar polarimetry from space](#) (Invited review) - Ted Tarbell

10:35-10:55 [The Large Aperture Solar Optical Telescope \(SUVIT\) for the Solar-C mission](#) - Kiyoshi Ichimoto, Solar-C Working Group

11:30-12:05 [Solar polarimetry from the ground](#) (Invited review) - Manuel Collados

12:05-12:25 [Polarimeter for Multi Application Solar Telescope \(MAST\) at Udaipur Solar Observatory](#) - Alok Ranjan Tiwary, Shibu K. Mathew

12:25-12:45 [Long-Term Variability of the Polarization Response Matrix of the Hinode Spectro-Polarimeter](#) - Bruce W. Lites

12:45-13:05 [Error analysis and optimization of polarization calibration optics in solar telescope](#) - Junfeng Hou, Dongguang Wang, Yuanyong Deng

15:00-15:35 [Instruments for Night-Time Polarimetry](#) (Invited review) - Christoph Keller

15:35-15:55 [High-accuracy spectropolarimetry with spectral polarization modulation](#) - Frans Snik et al.

15:55-16:30 [Laboratory studies of light scattered by macroscopic dust particles at visible wavelengths](#) (Invited review) - Olga Muñoz

Session 2: Diagnostics and Interpretation

17:00-17:35 [Multiple scattering in particulate media](#) (Invited review) - K. Muinonen, et al.

17:35-18:10 [Polarized radiative transfer in solar MHD simulations](#) (Invited review) - H. Uitenbroek

Tuesday 26th of May

Session 2: Diagnostics and Interpretation

09:00-09:35 [Solar inversion codes](#) (Invited review) – J. C. del Toro Iniesta

09:35-10:10 [Hanle effect diagnostics of the solar atmosphere](#) (Invited review) - Jiří Štěpán

10:10-10:45 A Possible Resolution of the Paradox of the Enigmatic D1 Line Polarization - Javier Trujillo Bueno, Luca Belluzzi

10:45-11:05 [Stellar inversion codes](#) (Invited review) - Thorsten A. Carroll

Session 4: Solar Chromosphere, Transition Region and Corona

11:35-12:10 [Spectropolarimetry of the solar chromosphere](#) (Invited review) - Andreas Lagg, GREGOR GRIS Team

12:10-12:45 [Magnetic Fields in Solar Prominences](#) (Invited review) - Arturo López Ariste

12:45-13:05 [Non-LTE chromospheric diagnostics and inversions in flux-emerging regions](#) - Jaime de la Cruz Rodriguez, Viggo Hansteen, Luis Bellot Rubio, Ada Ortiz

15:00-15:20 [Design and Status Updates of a Polarimeter for Chromospheric Measurements with SOLIS/VSM](#) - Sanjay Gosain, Jack Harvey

15:20-15:40 [Polarimetry of the X1 flare on March 29, 2014](#) - Lucia Kleint, Phil Judge

15:40-16:00 [Chromospheric Dichroism in Oxygen Photospheric Lines](#) - Tanausú del Pino Alemán, Javier Trujillo Bueno, Rafael Manso Sainz

16:00-16:20 [Spectra of Helium D3 observed with SST/TRIPPEL](#) - Tine Libbrecht, Dan Kiselman, Jaime de la Cruz Rodriguez

Session 5: Polarization in the Solar System and Exoplanetary Systems

17:00-17:35 [Polarization of the Jovian planets](#) (Invited review) - Robert West

17:35-18:55 [Optical linear polarimetric observations of Jupiter and Saturn using a Wedged Double Wollaston](#) - Ricardo Hueso et al.

18:55-18:15 [Towards measuring the magnetic field of Mercury with spectropolarimetry](#) - Arturo López Ariste

Wednesday 27th of May

Session 5: Polarization in the Solar System and Exoplanetary Systems

09:00-09:35 [Polarization of the small bodies of the solar system \(Invited review\)](#) - S. Bagnulo, Alberto Cellino, Ludmilla Kolokolova, Gian Paolo Tozzi

09:35-09:55 [Some interesting features of light scattering from grains to regolith](#) - Gorden Videen, Karri Muinonen, Evgenij Zubko, Yuriy Shkuratov

09:55-10:15 [Experimental scattering matrices of lunar dust simulant at 488 nm and 520 nm](#) - Jesús Escobar et al.

10:15-10:50 [Characterizing exoplanets through polarimetry](#) (Invited review) - D. Stam

10:50-11:10 [Polarization in exoplanetary systems caused by transit, grazing transit and starspot](#) - Nadiia M. Kostogryz, Taras M. Yakobchuk, Svetlana V. Berdyugina

Session 3: Solar Photosphere

- 11:40-12:15 [Polar Fields of the Sun \(Invited review\)](#) - Gordon Petrie
- 12:15-12:50 [Quiet Sun Magnetic Fields](#) (Invited review) - David Orozco Suárez
- 12:50-13:10 [Flux appearance and disappearance in the solar internetwork](#) - Milan Gošić, Luis Bellot Rubio
- 15:00-15:20 [The evolution of individual and groups of flux tubes as seen by IMAx/Sunrise](#) - Iker S. Requerey et al.
- 15:20-15:40 [Small-scale intergranular upflows as seen by Sunrise/IMaX: work in progress](#) - Dominik Utz, Jose Carlos del Toro Iniesta, Luis Bellot Rubio, Stefan Thonhofer
- 15:40-16:00 [Multi-wavelength observations of magnetic upflows in the solar atmosphere](#) - Shahin Jafarzadeh, Luc Rouppe van der Voort, Jaime de la Cruz Rodriguez
- 16:00-16:20 [Photospheric Flow Field Related to the Evolution of the Sun's Polar Magnetic Patches Observed by Hinode SOT](#) - Anjali John Kaithakkal et al.

Poster session

- 17:00-18:30 P.1. Performance Measurement of Liquid Crystal Variable Retarder - Dongguang Wang et al.
- P.2. [Long-Term Variability of the Polarization Response Matrix of the Hinode Spectro-Polarimeter - Bruce](#) W. Lites
- P.3 Solar Physics Research Integrated Network Group (SPRING): A Next Generation Ground-based Synoptic Network - Sanjay Gosain, Markus Roth, Frank Hill, Michael Thompson
- P.4 Blue shifted Stokes V profiles in the quiet Sun - Christoph Kiess
- P.5 Modeling the polarization of strong resonance lines in the general Hanle-Zeeman regime - Ernest Alsina Ballester, Luca Belluzzi, Javier Trujillo Bueno
- P.6 Peacock jets above a light bridge of a sunspot - Carolina Robustini, Jorrit Leenaarts, Jaime De La Cruz Rodriguez

Thursday 28th of May

Session 6: Stellar Magnetic Fields

- 09:00-09:35 [Stellar surface magnetic fields across the HR diagram](#) (Invited review) - Oleg Kochukhov
- 09:35-10:10 [Magnetic fields of massive stars](#) (Invited review) - Gregg Wade
- 10:10-10:45 [New insights into the origin and strength of magnetic fields in OB-type stars](#) (Invited review) - Svetlana Hubrig et al.
- 10:45-11:05 [The origin and role of magnetic fields in Herbig Ae/Be stars – a key to understand intermediate-mass star formation](#) - Markus Schoeller

Session 3: Solar photosphere

- 11:35-11:55 [The distinct magnetic property of the penumbra](#) - Rolf Schlichenmaier
- 11:55-12:15 [Penumbral return flux measured by spectral lines in the visible and infrared](#) - Morten Franz et al.
- 12:15-12:35 [Supersonic Evershed downflows](#) - Sara Esteban Pozuelo, Luis Bellot Rubio

12:35-12:55 [Formation of a solar Halpha filament from penumbra-like structures](#) - David Buehler, Andreas Lagg, Michiel van Noort, Sami K. Solanki

15:00-15:20 [A new vision of the line ratio method](#) - Marianne Faurobert, Gilbert Ricort

15:20-15:40 [Improved magnetogram calibration of Solar Magnetic Field Telescope and its comparison with the Helioseismic and Magnetic Imager](#) -Xianyong Bai et al.

15:40-16:00 [Vector magnetic field changes during flares using SDO/HMI data](#) - Sebastián Castellanos-Durán, Lucia Kleint, Benjamín Calvo-Mozo

16:00-16:20 [Can Flux Cancellation Build-Up Magnetic Flux Ropes?](#) - Stephanie Yardley, Lucie Green, David Williams, Lidia van Driel-Gesztelyi

16:20-16:40 [GUI for LCT analysis](#) - Jose Iván Campos Rozo, Santiago Vargas Domínguez