

Third Remote Sensing of the Inner Heliosphere and Space Weather Applications Workshop

Morelia, Mexico, 2015 – 20-24 October 2015

TUESDAY 20 OCTOBER 2015

UNAM Cultural Center (Morelia downtown)

PM1 (14:00-15:30)

The Worldwide IPS Consortium (I)

Chairman: Ernesto Aguilar-Rodriguez

- IPS Cross-Analyses, Mario Bisi (20+10)¹
- Discussions and informal presentations on IPS cross-analyses (60).

Coffee Break (15:30-16:00)

PM2 (16:00-17:30)

The Worldwide IPS Consortium (II)

- IPS cross-analyses discussions and steps moving forward (60)
- IPS Common Data Format v1.0 (IPSCDFv1.0) - Official Launch!, Mario Bisi (15) with discussions over IPSCDFv1.0 (15).

WEDNESDAY 21 OCTOBER 2015

UNAM Morelia Campus

Bus departure from the hotel to UNAM campus (8:15 AM)

AM1 (9:00-10:30)

Opening and Reports

Chairman: Américo González-Esparza

- Introduction and Welcome by A. Gonzalez-Esparza (12+3)
- Agenda by M. Bisi (3+2)
- STEREO HI (4+1)
- STEL (4+1)
- Ooty (4+1)
- Pushchino (4+1)
- China (4+1)
- LWA (4+1)
- MEXART (4+1)
- MWA (4+1)
- Radio Heliophysics with the Square Kilometre Array (SKA), Mario Bisi (8+2)
- Updates of Observations of Heliospheric Faraday Rotation (FR) and Interplanetary Scintillation (IPS) with the LOW Frequency ARray (LOFAR): Steps Towards Improving Space-Weather Forecasting Capabilities, Mario Bisi (15+5).

1 Time in brackets

Coffee and posters (10:30-11:00)

AM2 (11:00-12:30)

Faraday Rotation

Chairman: Igor Chashei

- CME magnetic field constraints from radio polarimetry with the MWA, Colin Lonsdale (20+5)
- LWA Observations of Faraday Rotation In the Solar Wind and CMEs, Stephen White (20+5)
- LOFAR Measurements of IPS and FR Signatures in a CME, Richard Fallows (20+5)
- General FR discussions (15)

Lunch (12:30-14:00)

PM1 (14:00-15:50)

Analyses, Results, and Modelling

Chairman: Victor De la Luz

- HELCATS: HELiospheric Cataloguing, Analysis and Techniques Service, Mario Bisi (10+5)
- Space Weather Forecasting Using Remotely-sensed Heliospheric IPS Data Sets From Around the World, Bernard Jackson (15+5)
- ENLIL Driven By a Global Solar Wind Boundary from Remotely-Sensed IPS Data, Hsiu-Shan Yu (15+5)
- HELCATS WP7: Assessing the Complementary Nature of Radio Measurements of Solar Wind Transients, Mario Bisi (10+5)
- Newtonian CAFE: a new ideal MHD code to study the solar atmosphere , J.J. González-Avilés (15+5)
- CME's drag mechanisms and their impact on space wheather forecasting, Pedro Corona-Romero (15+5)

Coffee and posters (15:50-16:30)

PM2 (16:30-17:40)

Invited Talks and Journal Special Issue

Chairman: Bernard Jackson

- Space Weather Forecasts That Failed, Douglas Biesecker (25+10)
- Interplanetary Type II Radio Bursts as Indicators of Large Solar Energetic Particle Events, Nat Gopalswamy (25+10)

PM3 (17:40-18:00)

Potential Topical/Special Journal Issue(s)?

- Mario Bisi (10+10)

Bus departure from UNAM campus to the hotel (18:05)

UNAM Cultural Center (Morelia downtown)

PM4 (19:20-21:00)

Ice Break at UNAM Cultural Center.

THURSDAY 22 OCTOBER 2015

UNAM Morelia Campus

Bus departure from the hotel to UNAM campus (8:15 AM)

AM1 (9:00-10:20)

Observations of IPS (I)

Chairman: Richard Fallows

- MEXART IPS observations. Instrument status report., Americo Gonzalez-Esparza (15+5)
- IPS Observation in China: Past, Now and Future, Lijia Liu (15+5)
- Interplanetary scintillation observations of the solar wind using the 372-MHz multi-station system, Munetoshi Tokumaru (15+5)
- Global Structure of the Inner Solar Wind and its Dynamic in the Solar Activity Cycle from IPS Observations with Multi-Beam Radio Telescope BSA LPI, Sergey Tyulbashev (15+5)

Coffee and posters (10:20-10:50)

AM2 (10:50-12:10)

Observations of IPS (II)

- Power law of micro-scale turbulence in the solar wind using IPS observations at different wavelengths, Ernesto Aguilar-Rodriguez (15+5)
- Detection of CME from IPS observations at the frequency 111 MHz, Sergey Tyulbashev (15+5)
- Modeling the power spectrum of IPS during coronal mass ejections, Julio Mejia-Ambriz (15+5)
- General IPS discussions (40).

Lunch (12:10-13:40)

PM1 (13:40-14:40)

Heliospheric Remote Sensing and Posters

Chairman: Mario Bisi

- Open discussions on heliospheric remote sensing

PM2 (14:40-16:00)

Coffee and posters

PM3 (16:00-17:30)

Ionosphere

Chairman: Julio Mejia-Ambriz

- Ionospheric Scintillation at Low Frequencies: Broadband Spectra and Phase Measurements, Richard Fallows (15+5)
- Ionospheric Disturbances detected in 2012 by MEXART, Armando Carrillo-Vargas (15+5)
- The effects of Space Weather in TEC behaviour over the Mexican region, Maria Sergeeva (15+5)
- Ionospheric Anomalies around the Time of the Powerful Nabro's Eruption Triggered by June 12, 2011 Earthquakes, Enoch Eleme (15+5)
- General ionosphere discussions (10)

Bus departure from UNAM campus to the hotel (17:40)

FRIDAY 23 OCTOBER 2015

MEXART facilities (Coeneo, Michoacan)

Bus departure from the hotel to MEXART site (7:15 AM)

AM1 (9:00-10:20)

MEXART Tour

- Welcome by MEXART Team.
- MEXART Tour
- Coffee and informal discussions on MEXART (30)

AM2 (10:20-11:40)

Space Weather and Other Topics

Chairman: Munetoshi Tokumaru

- Space Weather on the MEXART, Victor De la Luz (15+5)
- Analysis of the most energetic X-class solar flare detected by the solar neutron telescope at Sierra Negra, Xavier González (15+5)
- Space Weather during the Transient Plasma Signatures, Subhash Chandra Kaushik (15+5)
- Solar radio spikes: Evolution of particle distribution, Solai Jeyakumar (15+5)

Social Events

PM1 (12:00-15:00)

MEXART barbeque and vegetarian lunch

Bus departure from MEXART to the hotel (15:05)

PM2 (19:30-20:30)

Morelia coach tour

Bus departure Morelia coach tour and workshop dinner (19:30)

PM3 (21:00-22:30)

Workshop dinner

Bus return from the dinner site to the hotel (22:30)

SATURDAY 24 OCTOBER 2015

UNAM Cultural Center (Morelia downtown)

AM1 (9:00-11:00)

General Discussions and Moving Forward (I)

Chairmen: A. Gonzalez-Esparza, M. Bisi, and B. Jackson

- New Opportunities for IPS - A Personal Perspective, Mario Bisi (20+10)
- Open discussions (90).

AM2 (11:00-11:30)

General Discussions and Moving Forward (II)

- Close and next workshop planning
- Optional Elements

PM1 (12:00-)

Informal lunches and optional tours

Posters

- IPS observations at 140 MHz to study solar wind speeds and density fluctuations by MEXART, Oyuki Chang
- An alternative methodology for the estimation of IPS Inner Scale, Esmeralda Romero-Hernandez
- Comparison of Analytical Models of Propagation of CMEs and its Validation Using Type II Radio Bursts Observations, Carlos Perez-Alanis
- A Schumann Resonance Station in Mexico, Blanca Mendoza
- Study of geoeffectiveness generated by stream interaction regions using remote-sensing and in-situ measurements, Elsa Sanchez-Garcia
- Magnetic Service, Universidad Nacional Autónoma de México, Ana Caccavari-Garza
- ICME Origin of the Most Energetic Cosmic Ray Forbush Decreases during SolarCycle 24, Jose Valdes-Galicia
- Dynamics of the Plasma Events and Associated Space Weather Consequences, Subhash Chandra Kaushik