



# The International Symposium on Solar-Terrestrial Physics (ISSTP 12)

November 6 - 9, 2012

Indian Institute of Science, Education  
and Research, Pune, India

(Report by N. Gopalswamy)

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About 130 people attended that included ~20%  
of students

# The International Symposium on Solar-Terrestrial Physics (ISSTP 12) November 6 - 9, 2012



Participants

# Program

## 5 Nov 2012 Tutorial Session

09:00-10:00	<b>Solar Interior</b> Dr. H M Antia
10:00-11:0	<b>Solar Dynamo</b> Dr. Dibyendu Nandi
11:00-12:00	<b>Solar Atmosphere</b> Dr. R Erdelyi
12:00-1:00	<b>CMEs/ICMEs</b> Dr. Nandita Srivastava
2:30-03:30	<b>Solar Wind and IP Medium</b> Dr. P K Manoharan
03:30 -04:30	<b>Magnetosphere-Ionosphere Coupling</b> J.-P St-Maurice

## 6 Nov 2012 Inaugural Session

09:00-09:10	<b>Opening remarks</b> Dr. K. Ganesh Director, IISER Pune
09:10-09:20	<b>Remarks</b> Prof Siraj Hasan, co-chair, SOC, ISSTP 2012
09:20-09:30	<b>Remarks</b> Dr N Gopalswamy, co-chair, SOC, ISSTP 2012
09:30-09:35	<b>Remarks</b> Prof Sunil Mukhi, Head, Physics division, IISER Pune
09:30-09:35	<b>Vote of thanks</b> Dr Prasad Subramanian, chair, LOC



# Regular Oral Sessions

Time	6 Nov 2012	7 Nov 2012	8 Nov 2012
9:30-11:00	<b>Solar Dynamo/Interior</b> Chair : Petrus Martens Dibyendu Nandi (invited) H. M. Antia (invited) P Janardhan (contributed) Sushant Mahajan (contributed)	<b>Solar Interior, Transition Region &amp; Corona</b> Chair : S S Hasan Durgesh Tripathi (Invited) R Erdelyi (contributed) A K Srivastava (contributed) Sreejith P (contributed) Srividya S (contributed)	<b>Coronal Structure and Dynamics</b> Chair : R Erdelyi Petrus C Martens (invited) P F Chen (invited) D Banerjee (contributed)
11:30-13:00	<b>Magnetosphere-Ionosphere Coupling</b> Chair : A. Bhattacharyya K Shiokawa (invited) S G Kanekal (invited) J.-P St-Maurice (contributed) Jeni Victor N (contributed)	<b>Flares &amp; CMEs</b> Chair : Dave Webb E Kontar (invited) Prasad Subramanian (contributed) Nandita Srivastava (contributed) Avijeet Prasad (contributed)	
14:30-16:00	<b>Atmosphere-Ionosphere Coupling</b> Chair : JP St. Maurice A Bhattacharyya (invited) A K Patra (invited) K K Grandhi (contributed) S Sridharan (contributed)	<b>Space weather &amp; Climate I</b> Chair : K. Shiokawa D Webb (invited) N Gopalswamy (invited) A Lara (contributed) Vidya Charan Dwivedi (contributed)	<b>Visit Giant Meter Wave Radio Telescope</b>
16:30-18:00	<b>New Facilities</b> Chair : J Davila NLST (S S Hasan) MAST (P Venkatakrisnan) Aditya (J Singh)	<b>Space weather &amp; Climate II</b> Chair : Nat Gopalswamy D Fontaine (invited) D Pallamraju (invited) T Ogino (Contributed) A K Sinha (Contributed)	
18:30	<b>Cultural Program</b>	<b><u><a href="#">The Faint Young Sun Paradox</a></u></b> Public Lecture : Petrus Martens	

# SCOSTEP/CAWSES Session

Time	Program	Speaker
09:00-09:30	<b>Introduction</b>	<b>J. Davila</b>
	<b>Summary of Decadal</b>	<b>Shri Kanekal</b>
09:30-10:00	<b>TG1 Summary</b>	<b>Cora Randall</b>
10:00-10:30	<b>TG2 Summary</b>	<b>Gufran Beig</b>
11:00-11:30	<b>TG3 Summary</b>	<b>A. Asai</b>
11:30-12:00	<b>TG4 Summary</b>	<b>K. Shiokawa</b>
<b>CAWSES India – A. Bhattacharyya</b>		
13:30-14:30	<b>Solar Activities Solar influence on climate (theme-1)</b>	<b>P. K. Manoharan-</b>
	<b>Space weather and climate (theme-2)</b>	<b>D. Pallam Raju</b>
	<b>Atmospheric coupling processes (theme-3)</b>	<b>S. Gurubaran</b>
14:30-14:50	<b>CAWSES in Japan</b>	<b>T. Ogino</b>
14:50-15:10	<b>CAWSES in Korea</b>	<b>Y.-D. Park</b>
15:10-15:30	<b>CAWSES in China</b>	<b>Yihua Yan</b>
15:30-15:50	<b>CAWSES in Brazil</b>	<b>J.-P. Raulin</b>
15:50-16:10	<b>CAWSES in France</b>	<b>D. Fontaine</b>
16:30-17:45	<b>Panel Discussion: What Should be the Next SCOSTEP Scientific Program?</b>	<b>N. Gopalswamy - Introduction</b> <b>J. Davila (Moderator)</b> <b>D. Nandi</b> <b>K. Shiokawa</b> <b>J.-P. St-Maurice</b> <b>G. Beig</b>

# Posters

<a href="#">Ernest Amouzou</a>	Use of a Time Delay Dynamo Model to Obtain Solar-Like Sunspot Cycles
<a href="#">M. H. Gokhale</a>	Maintenance of Solar Variability by Power-Input from Solar-Planetary Gravitation: A Conceptual Model
<a href="#">Soumitra Hazra</a>	Double-Ring Algorithm for Solar Active Regions within the Framework of a Kinematic Dynamo Model
<a href="#">Iren Sobia.A</a>	Structure of Sun's magnetic field in solar wind during polar reversal phase
<a href="#">Goutami Chattopadhyay</a>	Development and comparison of ARMA, ARIMA and Autoregressive Neural Network models for univariate Forecast of the sunspot numbers
<a href="#">Partha Chowdhury</a>	Phase relationship and north-south asymmetry of sunspot Activity during cycles 19 - 24
<a href="#">Koushik Ghosh</a>	Search For Periodicities Of The Solar Neutrino Flux Data From Sudbury Neutrino Observatory Using Rayleigh Power Spectrum Analysis
<a href="#">M.H. Gokhale</a>	Fourier analysis of the Variation of 'Ca-Plage Index Data' From Kodaikanal Observatory (1907 – 1998)
<a href="#">Maya Prabhakar</a>	Analysis of solar coronal green line profiles from eclipse observations
<a href="#">Prasad Subramanian</a>	Solar radio noise storm structure: Nancay Radioheliograph and Giant Meterwave Radio Telescope observations
<a href="#">D Banerjee</a>	On the nature of propagating disturbances in the corona
<a href="#">P F Chen</a>	Filament formation and longitudinal oscillations
<a href="#">Madhusudan Ingale</a>	Constraining amplitude of turbulence in solar corona using observations of angular broadening of radio sources
<a href="#">Petrus C Martens</a>	The Solar Corona: What Are The Remaining Fundamental Physical Questions?
<a href="#">A. Satya Narayanan</a>	Fast MHD Kink Waves in Structured Loops with Steady Flows and Heating

# Posters ...

<a href="#">Ambili K M</a>	Impact of the storms on the equatorial ionosphere: Evidence for the multifaceted role played by the neutral wind.
<a href="#">Agbo, Godwin</a>	Solar Wind-Magnetosphere Coupling Effect on Radio Refractivity in 2008 for Minna
<a href="#">I.A.Ansari</a>	Control of Solar Wind Velocity and Interplanetary Magnetic Field on Pc4 Magnetic Pulsations at Low Latitudes in India
<a href="#">Badruddin</a>	Fluctuations in the interplanetary electric potential and energy coupling between the solar wind and the Magnetosphere
<a href="#">Busola Olugbon</a>	Observations of Pc 4-5 geomagnetic pulsations and associated HF Doppler variations at an equatorial region
<a href="#">Satarupa Chatterjee</a>	Scintillation in relation to equatorial electrodynamics
<a href="#">Sola Rufus Fayose</a>	Seasonal variation of total electron content at a terrestrial point within equatorial anomaly region
<a href="#">B .Jayashree</a>	Normal modes of field line oscillations in relation to ionospheric conductivity in Earth's outer magnetosphere
<a href="#">Dadaso Jaypal Shetti</a>	Comparison between IRI TEC and GPS-TEC during the geomagnetic storm at low Latitude station Hyderabad in India
<a href="#">Shashi Bhushan Singh</a>	Space Weather Study of Upper Atmosphere using VLF Waves
<a href="#">S. Sripathi</a>	Global response of the GPS TEC to some of the intense solar flares occurred during the solar cycle-23: case studies
<a href="#">Neethal Thomas</a>	A comparative study of ULF pulsations using CHAMP and Ground Observations
<a href="#">Sharad Chandra Tripathi</a>	The interconnection of Solar Transients affecting the Geo-space
<a href="#">Zaka Komenan Zacharie</a>	latitudinal profile of the Ionospheric disturbance dynamo magnetic signature : Comparison with the DP2 magneticDisturbance
<a href="#">Abhijeet Anil Khandagale</a>	A Study of Seismological Effects due to Solar Activity
<a href="#">M. Anna Lakshmi</a>	Coronal Mass Ejections associated with short and long duration X-ray flares
<a href="#">Divya Oberoi</a>	Imaging the Sun with the Murchison Widefield Array
<a href="#">Wageesh Mishra</a>	Using Heliospheric Imaging Observations to Forecast the Arrival Time of CMEs
<a href="#">Rashmi Rawat</a>	Multiple solar flares, solar energetic particle events and associated geomagnetic activity during descending phase of solar cycle 23
<a href="#">Prasad Subramanian</a>	Observations of self-similar expansion of flux rope CMEs: what does it imply for Lorentz force driving?
<a href="#">I.A.Ansari</a>	Control of Solar Wind Velocity on Low Latitude Pc3 Magnetic Pulsations in South-East Australia
<a href="#">Ananna Bardhan</a>	Variability of O <sup>+</sup> ion density due to solar flares as observed by SROSS-C2 satellite
<a href="#">Jayanta Kumar Behera</a>	Seasonal influence of cosmic radio noise signal at Indian Antarctic station Maitri



# Posters...

<a href="#">Surajit Chattopadhyay</a>	On the statistical aspects of sunspot number time series and its association with the summer- rainfall over India
<a href="#">Amitava Guharay</a>	Investigation of the quasi 2-day wave over Santa Maria, Brazil during summer
<a href="#">Bhagvat Keshavrao Kumthekar</a>	The study of effect of various parameters on intermediate waves
<a href="#">Muhammed Kutty P.V.</a>	Investigations Of The Lunar Influence On The Counter Electrojet (CEJ) Derived From The Geomagnetic Data
<a href="#">Viswanathan Lakshmi Narayanan</a>	Phase progression of high frequency gravity waves in the upper mesosphere and their implications
<a href="#">Archita Pandey</a>	Nightglow Observations of OI 630 nm Emission During The Ending Phase Of Solar Cycle 22
<a href="#">Parashram Patil</a>	Study of the Plasma Bubbles Observed from Low Latitude Station Kolhapur in OI 630.0 nm Emission Line by All-Sky Imager
<a href="#">Owolabi Temitope Pascal</a>	Spatial Variation of Worldwide Sq(H)
<a href="#">Narukull Venkateswara Rao</a>	Long term variability and trends of mean winds in the Mesosphere and lower thermosphere at low latitude
<a href="#">Dinesh Kumar Sharma</a>	Variations of O <sup>+</sup> ion density during low and high solar activity
<a href="#">S. Sathishkumar</a>	Observations 2-4 day inertia-gravity wave from equatorial troposphere to F-region during sudden stratospheric Warming event of 2009
<a href="#">Anand K. Singh</a>	Characteristics of Dayside Pc5 Waves Observed at Very High Latitude Indian Antarctic Station Bharati
<a href="#">Ashutosh Kumar Singh</a>	Early VLF perturbations with long recovery times at low latitude: a new phenomenon
<a href="#">Audline Jini</a>	Latitudinal and Radial Variations in the Solar Wind Electron Parameters
<a href="#">Vatsala Khetawat</a>	A comparison of solar wind structures observed at Venus and Earth
<a href="#">Sandeep Kumar</a>	Co-rotating Interaction Regions (CIR) and associated interplanetary variations and their geoeffectiveness during prolonged solar minimum.
<a href="#">Sujeet Kumar Mishra</a>	The study of solar wind plasma signatures with magnetic Cloud events and BI-directional electron flux
<a href="#">Koushik B G</a>	Extreme solar activities and their impact in geospace and on technological infrastructure.
<a href="#">Koushik B G</a>	Review of Solar activities and its impact on the global climate
<a href="#">Subhash Chandra Kaushik</a>	An Investigation of Highly Geoeffective Solar Transients and their Characteristics Features
<a href="#">R Selvakumaran</a>	Study of geomagnetic variations in association with Interplanetary scintillations during Solar cycle 22 and 23
<a href="#">Rahul Sharma</a>	Indicators for solar filament remnants in ICMEs
<a href="#">Y. P. Singh</a>	Prominent short-, mid-, and long-term periodicities in solar and geomagnetic activity
<a href="#">Nandita Srivastava</a>	Forecasting the Space Weather Impact : the COMESEP Project
<a href="#">V. Vasanth</a>	Investigation on Geoeffective CMEs in 23 solar cycle

# Posters...

<a href="#"><u>Arun Babu K. P.</u></a>	How are Forbush decreases related with IP magnetic field enhancements ?
<a href="#"><u>Badruddin</u></a>	Interplanetary coronal mass ejections, their associated features, related plasma/field variations and transient Modulation of cosmic rays
<a href="#"><u>Partha Chowdhury</u></a>	on the heliospheric modulation and periodicities of galactic Cosmic rays during ascending phase of cycle 24
<a href="#"><u>Gordienko G.</u></a>	Space weather study at the Institute of Ionosphere (Kazakhstan) : instrumentation and science
<a href="#"><u>Kale Gitanjali Vitthal</u></a>	Solar influence on Climate
<a href="#"><u>K. B. Ramesh</u></a>	Broad band imaging System for NLST
<a href="#"><u>K.E.Rangarajan</u></a>	Spectropolarimeter for National Large Solar Telescope

# Proceedings

- To be published in the Bulletin of the Astronomical Society of India Conference Series (<http://www.ncra.tifr.res.in/~basi/asics.htm>)
- Edited by N. Gopalswamy, S. Hasan, P. B. Rao & P. Subramanian
- Peer reviewed
- Page limits: 20 for tutorials; 10 for invited papers; 6 for contributed papers; 4 for posters
- Deadline: Jan 31, 2013
- Instructions will be emailed soon

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