



**2009 UN/NASA/ESA/JAXA Workshop on Basic Space Science
and the International Heliophysical Year 2007**
September 21– 25, 2009 Hotel Riviera, Daejeon, Korea

10:10~11:40, September 22, 2009

Dynasty Hall II (Room B)

Plenary Session and Invited Talk

- 10:10~10:40 Plenary-1 The United Nations Basic Space Science Initiative (UNBSSI)
H. J. Haubold (United Nations, Austria)
- 10:40~11:10 Plenary-2 International Space Weather Initiative (ISWI)
*J. M. Davila, N. Gopalswamy, and B. Thompson
(NASA-Goddard Space Flight Center, USA)*
- 11:10~11:40 Invited-1 Space Infrared Astronomy in Japan
T. Matsumoto (Seoul Nat'l Univ., Korea)



**2009 UN/NASA/ESA/JAXA Workshop on Basic Space Science
and the International Heliophysical Year 2007**
September 21– 25, 2009 Hotel Riviera, Daejeon, Korea

13:10~14:10, September 22, 2009

Dynasty Hall I (Room A)

TA 1: BSS Worldwide

- | | | |
|-------------|--------|--|
| 13:10~13:30 | TA 1-1 | Rebuilding the Iraqi National Astronomical Observatory (INAO)
<i>H. M. K. A.-Naimiy (Sharjah Univ., UAE)</i> |
| 13:30~13:50 | TA 1-2 | Advances in Astronomy and Astrophysics in the Last Years in Peru
<i>M. Ishitsuka, H. Trigo, A. Dalmau, A. Quispe, E. Choque, and D. Cabezas (Geophysical Inst. of Peru, Peru)</i> |
| 13:50~14:10 | TA 1-3 | A Decade of Capacity Building at the African Regional Center for Space Science and Technology Education in English
<i>E. O. Elemo (Obafemi Awolowo Univ., Nigeria)</i> |

13:10~14:10, September 22, 2009

Dynasty Hall II (Room B)

TB 1: IHY Overview

- 13:10~13:30 TB 1-1 International Heliophysical Year in Africa: Overview, Lessons and Future Plans
A. B. Rabiou (Federal Univ. of Tech., Nigeria)
- 13:30~13:50 TB 1-2 Research and Education in Astronomy and Solar-Terrestrial Relations in Bulgaria
P. Stoeva (Bulgarian Academy of Sciences, Bulgaria) and A. Stoev (Yuri Gagarin Public Astronomical Observatory and Planetarium, Bulgaria)
- 13:50~14:10 TB 1-3 Solar and Heliospheric Research in Slovakia and Related IHY Activities
I. Dorotovič (Slovak Central Observatory, Slovak Republic)
- 14:10~14:30 TB 1-4 Scientific Results Obtained during the Last Decade by the International Research Group in Geophysics Europe Africa
F. Ouattara, J. L. Zerbo, C. Zoundi (IRGGEAA, Burkina Faso), C. Amory-Mazaudier, Y. Cohen, R. Fleury, P. Lassudrie Duchesne, M. Menvielle, M. Petitdidier, C. Vila (IRGGEAA, France), J. P. Adoha, K. Boka, V. Doumbia, A. Koba, M. Niangoran, O. Obrou, S. Tanoh, Z. Zaka (IRGGEAA, Ivory Coast), M. Le Huy, T. Le Truong, H. Luu Viet, H. Pham ThiThu (IRGGEAA, Vietnam)

14:50~16:10, September 22, 2009

Dynasty Hall I (Room A)

TA 2: Ground-based Observations 1

- | | | |
|-------------|--------|--|
| 14:50~15:10 | TA 2-1 | Investigating of Magnetic Activities of Eclipsing Binaries Using Small Ground Based Telescopes
<i>D. Jassur (Tabriz Univ., Iran)</i> |
| 15:10~15:30 | TA 2-2 | Are GRMs the Most Violent Events in the Universe
<i>E. D. Lopez (Quito Astronomical Observatory, Ecuador)</i> |
| 15:30~15:50 | TA 2-3 | Spectroscopic Observations of Novae V1065 CENTAURI and V1280 SCORPII Using 45 cm Cassegrain Telescope at Arthur C Clarke Institute, Sri Lanka
<i>J. Adassuriya, S. Gunasekera, and I. Medagangoda (Arthur C Clarke Inst. for Modern Tech., Sri Lanka)</i> |
| 15:50~16:10 | TA 2-4 | NEO Research Project in Korea
<i>W. Han, Y.-I. Byun, H.-S. Yim, Y.-J. Choi, and H.-K. Moon (KASI, Korea)</i> |

14:50~16:10, September 22, 2009

Dynasty Hall II (Room B)

TB 2: IHY Instrument & Application 1

- | | | |
|-------------|--------|--|
| 14:50~15:10 | TB 2-1 | Benefits of Azerbaijan from IHY-2007 Programme: Regional and International Cooperation in the Field of Space Weather Studies and Perspectives
<i>E. S. Babayev (Azerbaijan Nat'l Academy of Sciences, Azerbaijan)</i> |
| 15:10~15:30 | TB 2-2 | The Astronomical Researches in Uzbekistan and Activities in a Frame of the Programs IHY-2007 and IYA-2009
<i>I. A. Ibragimov and Sh. A. Egamberdiev (Uzbekistan Academy of Science, Uzbekistan)</i> |
| 15:30~15:50 | TB 2-3 | MAGDAS Project at SERC for Space Weather and Its Application during IHY/ISWI
<i>K. Yumoto (Kyushu Univ., Japan) and MAGDAS/CPMN Group</i> |
| 15:50~16:10 | TB 2-4 | Real Time Data Transfer Techniques of the Global MAGDAS Magnetometer Network
<i>G. Maeda, S. Abe, T. Uozumi (Kyushu Univ., Japan), L. Musafar(LAPAN, Japan), and K. Yumoto (Kyushu Univ., Japan)</i> |

16:30~17:30, September 22, 2009

Dynasty Hall I (Room A)

[TA 3] Ground-based Observations 2 & Other Topics

- | | | |
|-------------|--------|---|
| 16:30~16:50 | TA 3-1 | Ground-based Observation of Lunar Impact by LCROSS
<i>Y.-J. Choi, H.-S. Yim, H.-K. Moon, and D.-H. Lee (KASI, Korea)</i> |
| 16:50~17:10 | TA 3-2 | MIRIS, Compact Wide-Field IR Space Telescope System Design
<i>W. Han, D.-H. Lee, U.-W. Nam, Y. Park, W.-S. Jeong, C. H. Ree, B. Moon, S. -M. Cha, S.-J. Park, J.-H. Park (KASI, Korea), S. W. Rhee, J. O. Park (KARI, Korea), H. M. Lee (Seoul Nat'l Univ., Korea), and T. Matsumoto (Japan Aerospace Exploration Agency, Japan)</i> |
| 17:10~17:30 | TA 3-3 | Spatial Analytical Methods in Medical Research using Geographic Information Systems and Data Mining
<i>H. Kaur (Hamdard Univ., India) and S. K. Wasan (Jamia Millia Islamia, India)</i> |

16:30~18:10, September 22, 2009

Dynasty Hall II (Room B)

[TB 3] IHY Instrument & Application 2

- 16:30~16:50 TB 3-1 A Study of Equatorial Electrojet over Africa from Magdas Observations
A. B. Rabiou (Federal Univ. of Tech., Nigeria), K. Yumoto, Y. Yamazaki (Kyushu Univ., Japan), A. I. Adimula (Univ. of Ilorin, Nigeria), L. B. Kolawole, O. M. Osinowo (Reedemer's Univ., Nigeria), B. Damitie (Bahir Dar Univ., Ethiopia), P. Baki, K. Gladys (Univ. of Nairobi, Kenya), and MAGDAS/CPMN Group (Kyushu Univ., Japan)
- 16:50~17:10 TB 3-2 Preliminary Results of Latitudinal Dependence of Pc3-4 Amplitudes at 96° MM Stations in Africa
E. M. Takla, K. Yumoto, M. G. Cardinal (Kyushu Univ., Japan), A. Mahrous (Helwan Univ., Egypt), G. Mengistu (Addis Ababa Univ., Ethiopia), T. Afullo (Univ. of Kwazulu-Natal, South Africa), A. Macamo, L. Joao (Eduardo Mondlane Univ., Mozambique), N. Mwiinga (Univ. of Zambia, Zambia), C. Uiso (Univ. of Dar es Salaam, Tanzania), P. Baki, C. Kianji (Nairobi Univ., Kenya), K. Badi (Sudan Univ. of Science and Tech., Sudan), S. Malinga (Hermanus mag.Observatory, South Africa), A. Meloni (Research INGV, Italy), K. Yumoto, and MAGDAS/CPMN Group)
- 17:10~17:30 TB 3-3 Observation of Equatorial Electrodynamics in Africa using AMBER Magnetometer Network
E. Yizengaw (Boston College, USA), M. Moldwin (Univ. of California, USA), A. Mebrahtu (Mekelle Univ., Ethiopia), B. Damtie (Bahir Dar Univ., Ethiopia), F. Anad (Centre de Recherche en Astronomie Astrophysique et Geophysique, Algeria), and C. Mbane Biouele (Univ.of Yaounde I, Cameroon)
- 17:30~17:50 TB 3-4 Remote Sensing of the Lower Ionosphere and the Radiation Belts with AWESOME and SID VLF Receivers
U. S. Inan, M. Cohen, N. Haque, B. Cotts, and D. Scherrer (Stanford Univ., USA)
- 17:50~18:10 TB 3-5 Operational and Scientific Results Obtained from AWESOME Receivers in India: Setup under IHY/UNBSSI Program
R. Singh, B. Veenadhari, A. K. Maurya, P. Vohat (Indian Inst. of Geomagnetism, India), P. Pant (ARIES, India), A. K. Singh (Banaras Hindu Univ., India), M. B. Cohen and U. S. Inan (Stanford Univ., USA)
- 18:10~18:40 Keynote-1 Nonadditive Entropy and Nonextensive Statistical Mechanics:



**2009 UN/NASA/ESA/JAXA Workshop on Basic Space Science
and the International Heliophysical Year 2007**
September 21– 25, 2009 Hotel Riviera, Daejeon, Korea

Basic Concepts and Recent Applications

C. Tsallis (Centro Brasileiro de Pesquisas Fisicas, Brazil)

09:00~10:00, September 23, 2009

Dynasty Hall II (Room B)

[Invited Session]

09:00~09:30 Invited-2 Sunspots

S. K. Solanki (Kyung Hee Univ., Korea)

09:30~10:00 Invited-3 Dynamics of Magnetic Flux Tubes in the Solar Atmosphere:
Merging, Growth and Eruption

G. S. Choe (Kyung Hee Univ., Korea)

10:30~12:30, September 23, 2009

Dynasty Hall II (Room B)

[WB 1] Space Climatology & Cosmic Rays

- 10:30~10:50 WB 1-1 Regional Climatic Response to Long-term Solar Activity Variations
O. M. Raspopov (Inst. of Terrestrial Magnetism, Ionosphere, and Radiowaves Propagation of RAS, Russia), O. V. Kozyreva (Inst. of the Physics of the Earth of RAS, Russia), and V. A. Dergachev (Ioffe Physico-Technical Inst. of RAS, Russia)
- 10:50~11:10 WB 1-2 Possible Traces of Solar Activity Effect on the Surface Air Temperature of Mid-Latitudes
A. Ozguc (Bogazici Univ., Turkey), A. Kilcik (Akdeniz Univ., Turkey), and J. P. Rozelot (Nice Univ., France)
- 11:10~11:30 WB 1-3 The Day after Solar Cycle 23
Y. Yi and S. Y. Oh (Chungnam Nat'l Univ., Korea)
- 11:30~11:50 WB 1-4 The Relations between Solar Wind Variations and the North Atlantic Oscillation
R. Al-Naimi and K. Al-Jumily (Al-Mustansiriyah Univ., Iraq)
- 11:50~12:10 WB 1-5 The Effects of Solar Activities on Annual Precipitation of Iran
M. Edalatdoust (Univ. of Tabriz, Iran)
- 12:10~12:30 WB 1-6 The Role of Space Weather and Cosmic Ray Effects in Global Climate Change
L. I. Dorman (Tel Aviv Univ., Israel)

14:00~15:40, September 23, 2009

Dynasty Hall II (Room B)

[WB 1] Space Weather

- 14:00~14:20 WB 2-1 An Attempt for Forecasting of Solar Flare Index During Solar Maximum
E. Tulunay (Middle East Technical Univ., Turkey), A. Ozguc (Bogazici Univ., Turkey), E. T. Şenalp (Middle East Technical Univ., Turkey), T. Atac (Bogazici Univ., Turkey), Y. Tulunay (Middle East Technical Univ., Turkey), and S. Yesilyurt (Bogazici Univ., Turkey)
- 14:20~14:40 WB 2-2 Extremal Events in Space Environment: Definition, Realization, the Forecast Possibility
V. N. Ishkov (Ionosphere and Radio Wave Propagation of Russian Academy of Sciences, Russia)
- 14:40~15:00 WB 2-3 Forecast of Geomagnetic Storm based on CME and Interplanetary Condition
R.-S. Kim (Chungnam Nat'l Univ., Korea), K.-S. Cho (KASI, Korea), Y.-J. Moon (Kyung Hee Univ., Korea), Y. Yi (Chungnam Nat'l Univ., Korea), and K.-H. Kim (Kyung Hee Univ., Korea)
- 15:00~15:20 WB 2-4 A Plan for Publication of a Magnetic Cloud List as a Long-Term Database
K. Marubashi, K.-S. Cho, K.-C. Choi, J.-H. Baek, and S. Choi (KASI, Korea)
- 15:20~15:40 WB 2-5 Satellite Anomalies and Space Weather
L. I. Dorman (Tel Aviv Univ., Israel), N. Iucci (Roma-Tre Univ., Italy), A. E. Levitin, A. V. Belov, E. A. Eroshenko, N. G. Ptitsyna (Russian Academy of Science, Russia), G. Villorosi (Roma-Tre Univ., Italy), G. V. Chizhenkov, L. I. Gromova (Russian Academy of Science, Russia), M. Parisi (Roma-Tre Univ., Italy), M. I. Tyasto, and V. G. Yanke (Russian Academy of Science, Russia)
- 16:00~16:20 Keynote-2 Special Functions and Pathways for Problems in Astrophysics: An Essay in Honor of A.M. Mathai
H. J. Haubold (United Nations, Austria)
- 16:20~16:50 Keynote-3 Mittag-Leffler Functions to Pathway Model to Tsallis Statistics
A. M. Mathai (Centre for Mathematical Sciences, India) and H. J. Haubold (United Nations, Austria)



**2009 UN/NASA/ESA/JAXA Workshop on Basic Space Science
and the International Heliophysical Year 2007**
September 21– 25, 2009 Hotel Riviera, Daejeon, Korea

09:00~10:00, September 24, 2009

Dynasty Hall II (Room B)

[Invited Session]

- 09:00~09:30 Invited-4 Response of the Geomagnetic Activity Indices to the Solar Wind Parameters
B.-H. Ahn (Kyungpook Nat'l Univ., Korea)
- 09:30~10:00 Invited-5 Astronomy in Korea
Y.-W. Kang (Sejong Univ., Korea)

10:20~12:00, September 24, 2009

Dynasty Hall II (Room B)

[THB 1] Sun & Solar Wind

- 10:20~10:40 THB 1-1 Characteristic Development of Magnetic Shear in a Flare-Producing Sunspot Obtained from Vector Magnetic Field Measurements by Hinode
T. Magara (Nat'l Astronomical Observatory of Japan, Japan)
- 10:40~11:00 THB 1-2 Catalogs of Special Populations of Coronal Mass Ejections
N. Gopalswamy (NASA, USA), S. Yashiro (Interferometrics, USA), G. Michalek, S. Akiyama, H. Xie, and P. Makela (Catholic Univ., USA)
- 11:00~11:20 THB 1-3 About Existence of Physical Borders between Structures of one Polarity on the Sun
V. Ishkov (Chief of Laboratory)
- 11:20~11:40 THB 1-4 A Solar Station in Ica - Mutsumi Ishitsuka: A Research Center to Improve Education at the University and Schools
R Terrazas (Universidad Nacioanl San Luis Gonzaga De Ica-Peru, Peru), M. Ishitsuka, and M. S. H. Trigos (Geophysical Ist. of Peru, Peru)
- 11:40~12:00 THB 1-5 Construction of Korean Space Weather Prediction Center
K. S. Cho, S. C. Bong, J. G. Hwang, Y. S. Kwak, R. S. Kim, J. J. Lee, S. H. Choi, J. H. Back, and Y.-D. Park (KASI, Korea)

09:00~10:20 September 25, 2009

Dynasty Hall II (Room B)

[FB 1] Magnetosphere & Ionosphere 1

- | | | |
|-------------|--------|--|
| 09:00~09:20 | FB 1-1 | Geomagnetic Indices and Solar Activities Correlations
<i>A. A. Hady (Cairo Univ., Egypt)</i> |
| 09:20~09:40 | FB 1-2 | Dynamo Processes in the Sun Earth System and Variations of the Earth's Magnetic Field
<i>A. -M. Christine (LPP/CNRS/UPMC, France)</i> |
| 09:40~10:00 | FB 1-3 | ULF Wave Activity of Magnetic Storms
<i>O. Kozyreva (Inst. of the Physics of the Earth, Russia)</i> |
| 10:00~10:20 | FB 1-4 | Pulsed Large Electric Field Near the Nightside Plasmapause Observed by the Polar Spacecraft
<i>K.-H. Kim (Kyung Hee Univ., Korea), F. M. (UC Berkeley, USA), and D.-H. Lee (Kyung Hee Univ., Korea)</i> |

10:40~11:40, September 25, 2009

Dynasty Hall II (Room B)

[FB 2] Magnetosphere & Ionosphere 2

- 10:40~11:00 FB 2-1 Response of the Magnetosphere and Ionosphere to Solar Wind Dynamic Pressure Pulse
K. S. Park (Kyung Hee Univ., Korea), T. Ogino (Nagoya Univ., Korea), and D. Y. Lee (Chungbuk Nat'l Univ., Korea)
- 11:00~11:20 FB 2-2 Penetration of Magnetospheric Electric Fields to Equator and Their Effects on Low Latitude Ionosphere During Intense Geomagnetic Storms
B. Veenadhar, S. Alex (Indian Inst. of Geomagnetism, India), T. Kikuchi (Nagoya Univ., Japan), R. Singh (Indian Inst. of Geomagnetism, India), and A. Shinbori (Nagoya Univ., Japan)
- 11:20~11:40 FB 2-3 Longitudinal Differences in the Equatorial Spread F Characteristics between Vietnam and Brazil
H. T. Lan (HCMiop, Vietnam), M. A. Abdu (INPE, Brazil), M. D. John (The Univ. of Western Ontario, UK), and B. Inez (INPE, Brazil)

11:40~12:30, September 25, 2009

Dynasty Hall II (Room B)

[Special Session] Future of IHY/ISWI

- 11:40~12:30 Special-1 Future of IHY/ISWI
N. Gopalswamy (NASA, USA)

16:50~18:00, September 23, 2009

Dynasty Hall III (Room C)

Poster Session

- 16:50~18:00 PS-1 What Interplanetary Condition Can Predict Well Intense Geomagnetic Storms?
E. Y. Ji, Y J. Moon, and D. H. Lee (Kyung Hee Univ., Korea)
- 16:50~18:00 PS-2 A Forward Modeling of the Persistent Downflows in Coronal Loops
V. S. Pandey, G. S. Choe (Kyung Hee Univ., Korea), P. Venkatakrishnan, and S. Gosain (Physical Research Laboratory, India)
- 16:50~18:00 PS-3 On the Relationship of Cosmic Ray Intensity with Solar, Interplanetary and Geophysical Parameters
K. A. Firoz, D. V. Phani Kumar, and K.-S. Cho (KASI, Korea)
- 16:50~18:00 PS-4 Astronomical Awareness Campaign in Nepal
A. Jayanta (Nepal Sanskrit Univ., Nepal)
- 16:50~18:00 PS-6 On Dissipation of Magnetoacoustic Waves in the Solar Corona
P. Agarwal (JIL Information Tech. Ltd., India) and U. Narain (Meerut College, India)
- 16:50~18:00 PS-7 Hierarchical Multilevel Block Truncation Coding of Satellite Color Images
L. E. George and B. Q. A-Abudi (Univ. of Baghdad, Iraq)
- 16:50~18:00 PS-8 Annual and Semiannual Variations of Equivalent Sq Current System along the 210 MM CPMN Stations
Y. Yamazaki, K. Yumoto, T. Uozumi, and A. Yoshikawa (Kyushu Univ., Japan)
- 16:50~18:00 PS-9 Application of Space Technology in Disaster Monitoring and management in Nigeria
A. B. Peter (Ministry of Education and Tech., Nigeria)
- 16:50~18:00 PS-10 The Development of Astronomy and Astrophysics in Iraq
B. Q. A.-Abudi (Baghdad Univ., Iraq), and H. M. A.-Naimiy (Sharjah Univ., UAE)
- 16:50~18:00 PS-11 Cosmic Ray Modulation in the Heliosphere Atmospheric Ionization during Solar Cycle
M. Buchvarova (Bulgarian Academy of Sciences, Bulgaria)

- 16:50~18:00 PS-12 Creating a Database and Analysis of Sunspots at the Solar Observatory of Ica National University in Peru
L. Martinez (Univeridad Nacional San luis Gonzaga de Ica-Peru, Peru), M. Ishitsuka, J. Ishitsuka, and M. S. H. Trigo (Geophysical Ist. of Peru, Peru)
- 16:50~18:00 PS-13 Possible Traces of Cosmic Ray Intensity and Solar Activity Variations Effects on the Surface Air Temperature of Turkey and Azerbaijan and Caspian Sea level changes
A. Kilchik (Akdeniz Univ., Turkey), A. Ozguc (Bogazici Univ., Turkey), E. Babayev (Azerbaijan Nati'l Academy of Sciences, Azerbaijan) and F. Mustafa (Azerbaijan National Academy of Sciences, Azerbaijan)
- 16:50~18:00 PS-14 A New Solar Radio Spectrograph, the Korean Solar Radio Burst Locator (KSRBL)
S.-C. Bong, K.-S. Cho, Y.-D. Park (KASI, Korea), D. E. Gary, Z. Liu, G. M. Nita (New Jersey Inst. of Tech., USA), Y. Dou (Beijing Normal Univ., China), and Y.-J. Moon (Kyung Hee Univ., Korea)
- 16:50~18:00 PS-15 A Survey of Magnetic Clouds in 2000
K.-C. Choi, K. Marubashi, K.-S. Cho (KASI, Korea), and D.-Y. Lee (Chungbuk Nat'l Univ., Korea)
- 16:50~18:00 PS-16 Potential Health Effects of Cosmic Ray Variations and Geomagnetic Disturbances on the Human Cardiologic Parameters and Dynamics of Acute Cardiac Events in Middle Latitudes on Earth
S. Dimitrova(Bulgarian Academy of Sciences, Bulgaria), E. Babayev(Azerbaijan Nat'l Academy of Sciences, Azerbaijan), H. Mavromichalaki and M. Papailiou(Nat'l and Kapodistrian Univ. of Athens, Greece)
- 16:50~18:00 PS-17 Building WEB Sites for Dissemination of Regional Space Science Achievements
D. Danov (Bulgarian Academy of Sciences, Bulgaria)
- 16:50~18:00 PS-18 Great Solar Energetic Particle Events: Monitoring and Forecasting of Radiation Hazard by Using On-Line One-Min Neutron Monitor Data
L. I. Dorman (Tel Aviv Univ., Israel)
- 16:50~18:00 PS-19 Development of Empirical Space Weather Forecast based on

Solar Information

Y.-J. Moon (Kyung Hee Univ., Korea), R.-S. Kim (Chungnam Nat'l Univ., Korea), and K.-S. Cho (KASI, Korea)

- 16:50~18:00 PS-20 On the Connection of Cosmic Ray Long-Term Variation with Sunspot Numbers: Convection-Diffusion and Drift Modulations in the Heliosphere
L. I. Dorman (Tel Aviv Univ., Israel)
- 16:50~18:00 PS-21 High Resolution Spectroscopic Measurements and Modeling of the O2 (1,0) Absorption Lines
G. Veneta, W. Rolf (Bulgarian Academy of Sciences, Bulgaria), and V. Istvan (Astronomical Observatory, Serbia)
- 16:50~18:00 PS-22 An Imaging Spectroscopic Study of EUV Active Region Transient Brightenings by Hinode/EIS
K.-S. Lee, Y.-J. Moon (Kyung Hee Univ., Korea), and S. Kim (KASI, Korea)
- 16:50~18:00 PS-23 Automatic Real-Time System of the Global 3-D MHD Model
G. Park, S. Choi, I.-H. Cho, J.-H. Baek (KASI, Korea), K. S. Park (Kyung Hee Univ., Korea), K.-S. Cho (KASI, Korea), and G. Choe (Kyung Hee Univ., Korea)
- 16:50~18:00 PS-24 Continuous Wavelet Transform Analysis of Near-Tail Dipolarizations Observed by the THEMIS Satellites
M.-Y. Park (Chungbuk National Univ., Korea), D.-Y. Lee (Chungbuk National Univ., Korea), S. Ohtani (Applied Physics Lab, USA) and K.-C. Kim (Chungbuk National Univ., Korea)
- 16:50~18:00 PS-25 Interplanetary Transient Flows And Associated Forbush Events
A. Shrivastava, S. Sharma, S. Kumar, A. Khanna (Jiwaji Univ., India), and S. C. Kaushik (Government Autonomous PG College, India)
- 16:50~18:00 PS-26 Investigation of the Differential Rotation by H α Filaments and Compact Magnetic Elements for Solar Activity Cycle 21
D. Japaridze, M. Gigolashvili, and V. Kukhianidze (Ilia Chavchavadze State Univ., Georgia)
- 16:50~18:00 PS-27 Empirical Forecast Evaluation of CIRs and Geomagnetic Storms Using Coronal Holes

J. H. Lee (Ewha Womans Univ., Korea) and Y. J. Moon (Kyung Hee Univ., Korea)

- 16:50~18:00 PS-28 Experiments of the Slovak Central Observatory in Hurbanovo for the Total Solar Eclipse – China 2009
T. Pinter, I. Dorotovič (Slovak Central Observatory, Slovak Republic), and M. Rybanský (Inst. of Experimental Physics SAS, Slovak Republic)
- 16:50~18:00 PS-29 Heavy Ions in the Solar Wind and the Cosmic Radiation
I. Dorotovič, T. Pinter (Slovak Central Observatory, Slovak Republic), K. Kudela, and M. Rybansky (Inst. of Experimental Physics SAS, Slovak Republic)
- 16:50~18:00 PS-30 Long-Term Correlation between the Geomagnetic Activity and Interplanetary Parameters on 27- Day Average Basis
V. C. Dwivedi, D. P. Tiwari, and S. P. Agrawal (A.P.S. Univ., India)
- 16:50~18:00 PS-31 Empirical Forecasting Method of Solar Proton Events Based on Flare Parameters
J. H. Park, Y. J. Moon, and D. H. Lee (Kyung Hee Univ., Korea)
- 16:50~18:00 PS-32 Influences of Space Weather on the Geostationary Satellite Anomalies during 1997 – 2008
H.-S. Choi, J. Lee, K.-S. Cho, I.-H. Cho, and Y.-D. Park (KASI, Korea)
- 16:50~18:00 PS-33 Installation of Correlation Tracker System for New Solar Telescope
S. Choi (KASI, Korea), K. Ahn (Seoul Nat'l Univ., Korea), J. Nah (KASI, Korea), Y.-J. Moon (Kyung Hee Univ., Korea), and Y.-D. Park (KASI, Korea)
- 16:50~18:00 PS-34 Integrated Data System for Space Weather Prediction Center of Korea Astronomy and Space Science Institute
S. Choi, J.-H. Baek, K.-S. Cho, Y.-D. Park (KASI, Korea), and Y.-J. Moon (Kyung Hee Univ., Korea)
- 16:50~18:00 PS-35 KASI Total Solar Eclipse Expedition in 2009
Y.-H. Kim, S.-C. Bong, Y.-D. Park, D.-J. Lee, and J.-H. Baek (KASI, Korea)
- 16:50~18:00 PS-36 Characterization of Low Latitude GPS-TEC during Ccurrent

- Low Solar Activity Phase and Implications
P. Galav, S. Sharma (Mohan Lal Sukhadia Univ., India), N. Dashora (Nat'l Atmospheric Research Lab., India), and R. Pandey (Mohan Lal Sukhadia Univ., India)
- 16:50~18:00 PS-37 Total and Spectral Solar Irradiance Variation and Solar Wind
Kapanadze N. G. and Gigolashvili M. Sh. (Ilia Chavchavadze State Univ., Georgia)
- 16:50~18:00 PS-38 Nonlinear Interactions and Chaos in Planetary Systems
P. Trenchev and R. Shkevov (SRI-BAS, Bulgaria)
- 16:50~18:00 PS-39 Low Energy Electron Precipitation in Polar Cap Region Observed by STSAT_1
J. H. Hong (KAIST, Korea), J.-J. Lee (KASI, Korea), K.-S. Park (Kyung Hee Univ., Korea), K.-W Min (KAIST, Korea), and K.-H Kim (Kyung Hee Univ., Korea)
- 16:50~18:00 PS-40 On the Question of Investigation of Variations of the Solar Constant during the Period of the Severe Geomagnetic Storms
A. M. Chkhetia (Michail Nodia Geophysical Inst., Georgia), M. S. Gigolashvili (Ilia Chavchavadze State Univ., Georgia), and M. O. Ebralidze (Michail Nodia Geophysical Inst., Georgia)
- 16:50~18:00 PS-41 Peculiarities of Aurora Emissions during Substorms due to Different Solar Wind Streams
V. Guineva (Bulgarian Academy of Sciences, Bulgaria), Z. Dashkevich, and I. Despirak (Polar Geophysical Inst., Russia)
- 16:50~18:00 PS-42 Peculiarities of Connection between Space-time Variations of Precipitation and Geomagnetic Activity
O. Rubtsova, V. Kovalenko, and S. Molodykh (Inst. of Solar – Terrestrial Physics of RAS SB, Russia)
- 16:50~18:00 PS-43 Periodicities Associated with the Geomagnetic Field Variation using INTERMAGNET Data
A. B. Rabi, O. A. Garuba, O. O. Adekanmbi, S. A. Alabi, L. L. Ojurongbe (Federal Univ. of Tech., Nigeria), O. Elemo (Obafemi Awolowo Univ., Nigeria), and A.S. Lawani (Federal Univ. of Tech., Nigeria)
- 16:50~18:00 PS-44 Low Latitude E-region Irregularities Studied Using Gadanki

- Radar, Ionosonde and Insitu Measured Electron Density
D. V. P. Kumar, Y.-S. Kwak (KASI, Korea), A. K. Patra (Nat'l Atmospheric Research Laboratory, India), K.-H. Kim (Kyung Hee Univ., Korea), and G. Yellaiah (Osmania Univ., India)
- 16:50~18:00 PS-45 Space Environment Monitor over Trans-Polar Route
J. Lee, J. Hwang, K.-S. Cho, H.-S. Choi, and J.-H. Baek (KASI, Korea)
- 16:50~18:00 PS-46 Educational Research of Space Weather with Sudden Ionospheric Disturbance (SID) Monitors in Korea
Y.-S. Kwak, J.-J. Lee (KASI, Korea), S.-M. Park (KAIST, Korea), O.-G. Lee (Kyungbuk Science High School, Korea), and D. Scherrer (Stanford Univ., USA)
- 16:50~18:00 PS-47 Physical Processes in the Active Solar Regions
S. Lukov and R. Shkevov (SRI - BAS, Bulgaria)
- 16:50~18:00 PS-48 Pi 2 Pulsations Observed by an FM-CW Ionospheric Radar and MAGDAS Magnetometer at Mid-latitude Station
A. Ikeda, K. Yumoto, T. Uozumi (Kyushu Univ., Japan), M. Shinohara (Kagoshima Nat'l College of Tech., Japan), K. Nozaki (Nat'l Inst. of Information and Communications Tech., Japan), A. Yoshikawa (Kyushu Univ., Japan), V. V. Bychkov and M. Shevtsov (Inst
- 16:50~18:00 PS-49 MIRIS: The Infrared Imaging System for Space Observation
B. Moon, S.-M. Cha, W.-S. Jeong, S.-J. Park, C. H. Ree, J.-H. Park, U.-W. Nam, Y. Park, D.-H. Lee, I.-S. Yuk, S. Lee, D.-H. Lee (KASI, Korea), S.-W. Rhee, J.-O. Park (KARI, Korea), S. C. Yang (KBSI, Korea), T. Matsumoto (ISAS, Japan), and W. Han (KASI, Korea)
- 16:50~18:00 PS-50 GCRs Decrease associated with the Solar North-South Asymmetry: Explanation for Increased Temperature
I.-H. Cho, Y.-S. Kwak (KASI, Korea), H.-Y. Chang (Kyungpook Nat'l Univ., Korea), K.-S. Cho, H.-S. Choi (KASI, Korea), and K.-H. Kim (Kyung Hee Univ., Korea)
- 16:50~18:00 PS-51 Network Observation Using Several Robotic Telescopes
H.-S. Yim, Y.-J. Choi, M.-J. Kim, Y.-H. Bae, J.-H. Park, J. H. Jo, H.-K. Moon, Y.-I. Byun, and W. Han (KASI, Korea)
- 16:50~18:00 PS-52 SAVNET: Current Results and Future Initiatives

F. Bertoni, J.-P. Raulin, H. R. Gavilán (CRAAM/UPM, Brazil), W. G. Day (CONIDA, Peru), G. Fernandez (CASLEO, Argentina), and R. Rodriguez (UDEP, Peru)

- 16:50~18:00 PS-53 Experimental Study of Clear Air Condition and its Implication on Microwave Communication over Minna, North Central Nigeria
B. G Ayantunji and P. N Okeke (Univ. of Nigeria Nsukka, Nigeria)
- 16:50~18:00 PS-54 Numerically Estimating Relativistic Electron Flux Dropouts during Geomagnetic Storms
K.-C. Kim, D.-Y. Lee (Chungbuk Nat'l Univ., Korea), H.-J. Kim (Univ. of California, USA), E. S. Lee (UC-Berkeley, USA), and C. R. Choi (KAIST, Korea)
- 16:50~18:00 PS-55 Photometric Observation of Active Comets - 17P/Holmes, C/2007 N3 (Lulin), C/2008 T2 (Cardinal)
M.-J. Kim (Yonsei Univ., KASI, Korea), Y.-J. Choi (KASI, Korea), Y.-I. Byun (Yonsei Univ., Korea), J. Watanabe, R. Furusho (Nat'l Astronomical Observatory of Japan, Japan), M. Ishiguro (Seoul Nat'l Univ., Korea), Y. Sarugaku (The Univ. of Tokyo, Japan) and D. Kinoshita (Nat'l Central Univ., Taiwan)
- 16:50~18:00 PS-56 Possibility for the Prediction of the High Energy Solar Proton Events (SPEs) Based on Ground Level Enhancements (GLEs)
S. Lee (KASI, Korea), Y. Yi (Chungnam Nat'l Univ., Korea), K.-S. Cho (KASI, Korea), S. Y. Oh (Chungnam Nat'l Univ., Korea), and K. A. Firoz (KASI, Korea)
- 16:50~18:00 PS-57 Sonification in the Study of Solar Flares and Coronal Mass Ejections: Impact on Solar Plasmas
W. L. D.-Merced (Univ. of Glasgow, UK), R. M. Candey (NASA Goddard Space Flight Center, USA), J. C. Mannone (Univ. Politecnica San Juan, USA), S. Brewster (Univ. of Glasgow, UK), E. Rodriguez and A. Schertenleib (Univ. Politecnica San Juan, USA)
- 16:50~18:00 PS-58 Space Weather Effects of 21, 22, and 23 Solar Cycles on Food Crops Production in Latitudes
H. A. Lawal, V. U. Chukwuma (Olabisi Onabanjo Univ., Negeria), and A. A. Adebawale (Univ. of Agriculture Abeokuta, Nigeria)

- 16:50~18:00 PS-59 Spatial and Temporal Regularities of Connection between the Troposphere Heat Content and Variations of Solar and Geomagnetic Activities
S. Molodykh, V. Kovalenko, and L. Vasil'eva (Inst. of Solar-Terrestrial Physics SB RAS, Russia)
- 16:50~18:00 PS-60 Relations among Sunspots, CMEs and Geomagnetic Storms in Solar Cycle 23
S.-L. Rho (KASI Korea), H.-Y. Chang (Kyungpook Nat'l Univ., Korea), R.-S. Kim, K.-S. Cho, Y.-H. Kim, and Y.-D. Park (KASI, Korea)
- 16:50~18:00 PS-61 Latitudinal Variation of Geomagnetic Field Parameters along 96o Magnetic Meridian in Africa
A. B. Rabiou (Federal Univ. of Tech., Nigeria), K. Yumoto, and MAGDAS/CPMN Group (Kyushu Univ., Japan)
- 16:50~18:00 PS-62 Research on the Variation of Ionosphere by using SID Monitor
M.-J. Gwon, Y.-B. Choi, H.-J. Ha, O.-K. Lee (Kyoung Buk Science Highschool, Korea) Y.-S. Kwak, and J.-J. Lee (KASI, Korea)
- 16:50~18:00 PS-63 Simultaneous Observation of FUV Aurora with Inverted-V structure Precipitating Electrons on STSAT-1
C. N. Lee (KAIST, Korea), J. J. Lee (KASI, Korea), K. W. Min (KAIST, Korea), G. K. Parks (Univ. of California, USA), K. S. Cho, W. Han (KASI, Korea), and J. Edelstein (Univ. of California, USA)
- 16:50~18:00 PS-64 Structurally Adequate Model of Magnetospheric Processes and Its Role in the Program "Space Weather "
P. A. Sedykh (Irkutsk State Medical Univ., Russia)
- 16:50~18:00 PS-65 Study of Super Storms And Associated Cosmic Ray Intensity Variation
S. C. Kaushik (Government Autonomous College, India) and A. Shrivastava (Jiwaji Univ., India)
- 16:50~18:00 PS-66 Study of the Long-term Variability of Interplanetary Parameters and their Impact on Geomagnetic Field
V. C. Dwivedi, D. P. Tiwari, and S. P. Agrawal (A.P.S. Univ., India)

- 16:50~18:00 PS-67 Some Plasma Properties Associated with Bursty Bulk Flows in the Near-Earth Tail
H.-S. Kim (Kyungpook Nat'l Univ., Korea), D.-Y. Lee (Chungbuk Nat'l Univ., Korea), S. Ohtani (The Johns Hopkins Univ. Applied physics Laboratory, USA), E.-S. Lee (Univ. of California, Berkeley, USA), and B.-H. Ahn (Kyungpook Nat'l Univ., Korea)
- 16:50~18:00 PS-68 New Particle Detector Network for Solar Physics and Space Weather Research
A. Chilingarian (Alikhanyan Physics Inst., Armenia), C. Angelov (Nuclear Physics Inst. of the Bulgarian Academy of Science, Bulgaria), K. Arakelyan (Alikhanyan Physics Inst., Armenia), T. Arsov (Nuclear Physics Inst. of the Bulgarian Academy of Science, Bulgaria), K. Avakyan (Alikhanyan Physics Inst., Armenia), S. Chilingaryan (Institut fuer Prozessdatenverarbeitung und Elektronik, Germany), A. Hovhanissyan, G. Hovsepyan (Alikhanyan Physics Inst., Armenia), D. Hržina (Zagreb Astronomical Observatory, Croatia), T. Hovhannisyan (Alikhanyan Physics Inst., Armenia), D. Maričić (Zagreb Astronomical Observatory, Croatia), A. Nishev, A. Tchorbadjieff, I. Kalapov (Nuclear Physics Inst. of the Bulgarian Academy of Science, Bulgaria), T. Karapetyan, L. Kozliner, B. Mailyan (Alikhanyan Physics Inst., Armenia), A. Reymers, I. Romštajn, D. Roša (Zagreb Astronomical Observatory, Croatia), J. Stamenov (Nuclear Physics Inst. of the Bulgarian Academy of Science, Bulgaria), S. Tserunyan, S. Abovyan, and D. Pohksroryan (Alikhanyan Physics Inst., Armenia)
- 16:50~18:00 PS-69 Study of Super Storms And Associated Cosmic Ray Intensity Variation
S. Sharma (Jiwaji Univ., India), S. C. Kaushik (Government Autonomous PG College, India), and A Shrivastava (Jiwaji Univ., India)
- 16:50~18:00 PS-70 The Ionosphere Structures during the Geomagnetic Storms Associated with the Solar and Interplanetary Phenomena from the Multi-Satellite and Ground Based Data
L. Biktash (IZMIRAN, Russia)
- 16:50~18:00 PS-71 Investigation of the Solar Corona during the 22 July 2009 Total Solar Eclipse Using Ground-based and Satellite Data
P. Stoeva (Bulgarian Academy of Sciences, Bulgaria), S.

Kuzin (Lebedev Physical Inst., Russia), A. Stoev, N. Stoyanov (Yuri Gagarin Public Astronomical Observatory and Planetarium, Bulgaria), and A. Pertsov (Lebedev Physical Inst., Russia)

- 16:50~18:00 PS-72 Some Statistical Characteristics of the Solar Wind and Magnetosphere Associated with Northward IMF Substorms
J.-H. Lee, D.-Y. Lee, and K.-C. Choi (Chungbuk Nat'l Univ., Korea)
- 16:50~18:00 PS-73 The Solar Wind Data and Geomagnetic Indices for the Study of the Equatorial Scintillations Appearance during Geomagnetic Storms
L. Biktash (IZMIRAN, Russia)
- 16:50~18:00 PS-74 The Total Ozone Behaviour over Bulgaria during the 23 Solar Cycle
B. Mendeva, T. Gogosheva, D. Krastev, and B. Petkov (Bulgarian Academy of Sciences, Bulgaria)
- 16:50~18:00 PS-75 Spectroscopic Comparison between Preflare Site and Quiet Loop Using Hinode EIS
S. J. Kim (KASI, Korea), Y.-J. Moon, K.-S. Lee (Kyung Hee Univ., Korea), Y.-H. Kim and K.-S. Cho (KASI, Korea)
- 16:50~18:00 PS-76 Using of Current Solar Data Bases in Problems for Astronomical Olympiads
A. Stoev (Yuri Gagarin Public Astronomical Observatory and Planetarium, Bulgaria), P. Stoeva (Bulgarian Academy of Sciences, Bulgaria), and E. Bojurova (Nicolaus Copernicus Public Astronomical Observatory and Planetarium, Bulgaria)
- 16:50~18:00 PS-77 Variations of the Auroral Emissions and the Absorption at 38.2 MHz during Substorms
V. Guineva (Bulgarian Academy of Sciences, Bulgaria), I. Despirak (Polar Geophysical Inst., Russia), R. Werner (Bulgarian Academy of Sciences, Bulgaria), E. Trondsen (Univ. of Oslo, Norway), F. Honary, S. Marple (Lancaster Univ., UK), K. Dahle (Andoya Rocke Range, Norway), and P. Stauning (Danish Meteorological Inst., Denmark)
- 16:50~18:00 PS-78 Stereo Observations for Near Earth Space Survey
H.-S. Yim (KASI, Korea), H. Yi (Yonsei Univ., Korea), Y.-J. Choi, J. Byeon, J. Choi, S.-Y. Yu, M.-J. Kim, J.-H. Park, J. H.

Jo, H.-K. Moon (KASI, Korea), Y.-I. Byun (Yonsei Univ., Korea), and W. Han (KASI, Korea)

- 16:50~18:00 PS-79 Visualization and Signal Processing of Sunspot Data
Kais A. J. (Al-Mustansiriyah Univ., Iraq)
- 16:50~18:00 PS-80 Study of the Relationship between the CME Initial Speed and the Magnetic Flux and Magnetic Helicity of MC
S.-K. Sung (Kyung Hee Univ., Korea), K. Marubashi, K.-S. Cho, Y.-H. Kim (KASI, Korea), K.-H. Kim (Kyung Hee Univ., Korea), J. Chae (Seoul Nat'l Univ., Korea), Y. -J. Moon, and I. -H. Kim (Kyung Hee Univ., Korea)
- 16:50~18:00 PS-81 The Small and Fast Robotic Observation System
H.-S. Yim, H.-K. Moon, Y.-J. Choi, Y.-W. K, S. Park (KASI, Korea), J.-N. Yoon (Chungbuk Nat'l Univ., Korea), S.-Y. Yu (KASI, Korea), J.-H. Youn, Y.-H. Bae, M.-J. Kim, J. Byeon (KASI, Korea), S.-W. Chang, H. Yi (Yonsei Univ., Korea), J. Choi (KASI, Korea)
- 16:50~18:00 PS-82 Three-Dimensional Magnetohydrodynamic Simulations of Nonlinear Field Line Resonances
K. I. Kim, D. H. Lee (Kyung Hee Univ., Korea), and D. S. Ryu (Chungnam Nat'l Univ., Korea)
- 16:50~18:00 PS-83 Waddle to Cosmic Waltzing
A. Marrero (Shirohisa Ikeda Project in Physics Mathematics and Astronomy, Puerto Rico), L. Villanua, E. Ortiz (Andanza Inc., Puerto Rico), E. Rodriguez (Shirohisa Ikeda Project, Puerto Rico), W. L. Diaz-Merced, S. Brewster (Univ. of Glasgow, UK), and R. Candey (NASA GSFC, USA)
- 16:50~18:00 PS-84 Recent Upgrade of Kottamia Observatory and First Light Observations
H. Ismail (NRIAG, Egypt)
- 16:50~18:00 PS-85 Meteorite and Crater of Carancas, Peru
D. P. Cabezas, J. K. Ishitsuka, and A. Dalmau (Astronomy Division of Geophysical Inst. of Peru, Peru)
- 16:50~18:00 PS-86 Space Weather Monitors and Research-based Education in High Schools in the Underdeveloped Countries
A. A. Faiyetole (EarthSpace Resources Foundation, Nigeria), D. Scherrer (Stanford Univ., USA), and Y. D. Takahashi (UC Berkeley, USA)

- 16:50~18:00 PS-87 Experimental Study Of Clear Air Condition And Its Implication On Microwave Communication Over Minna, North Central Nigeria
B. G. Ayantunji (Univ. of Nigeria Nsukka, Nigeria) and P. N. Okeke (Univ. of Nigeria Nsukka, Nigeria)
- 16:50~18:00 PS-88 Upper Atmospheric Disturbance Detection Criteria of All-Sky Camera in Mt. Bohyun
T. Y. Yang, Y. S. Kwak, K.-S. Cho, J. A. Hwang (KASI, Korea) and G. H. Jee (Korea Polar Research Inst., Korea)
- 16:50~18:00 PS-89 Construction of Korean Space Weather Prediction Center
K. S. Cho, S. C. Bong, J. G. Hwang, Y. S. Kwak, R. S. Kim, J. J. Lee, S. H. Choi, J. H. Back, and Y.-D. Park (KASI, Korea)
- 16:50~18:00 PS-90 VHF Coherent Scatter Radar Development for Korea Space Weather Prediction Center
J. Hwang, Y.-S. Kwak, J. J. Lee, T. -Y. Yang, and K.-S. Cho (KASI, Korea)
- 16:50~18:00 PS-91 Variations of the Lower Ionosphere Observed by the SID Monitor
J. S. Jang, C. K. Ryu, J. G. Cho, J. H. Hong (KAIST, Korea), J. J. Lee, Y.-S. Kwak (KASI, Korea), K. W. Min, and S. M. Park (KAIST, Korea)
- 16:50~18:00 PS-92 Spatial Variations of the Equatorial Electrojet at some African stations
Adimula, I. A (Univ. of Ilorin, Nigeria) , A. B. Rabiun (Federal Univ. of Tech., Nigeria), O. A. Oladipo (Univ. of Ilorin, Nigeria), K. Yumoto (Federal Univ. of Tech., Nigeria) and J. O. Adeniyi (Univ. of Ilorin, Nigeria)
- 16:50~18:00 PS-93 High Speed Stream during SC 23 – A Romanian Contribution to IHY
G. Maris (Inst. of Geodynamics, Romania) and Ovidiu Maris (Inst. for Space Sciences, Romania)