

# Space Weather Workshop

Millennium Hotel – Boulder, CO

April 24 - 27, 2012

## Poster Layout

Posters may be on display from Tuesday morning through Thursday afternoon. We request that authors be in attendance at their posters during the poster session on the day indicated below.

### Solar and Interplanetary Research and Applications (Tuesday)

**Fry, Craig (Ghee)** (Exploration Physics International, Inc.)

Poster Number: S-1

Poster – *The Radiation, Interplanetary Shocks, and Coronal Sources (RISCS) Toolset*

**Thompson, Barbara J.** (NASA Goddard Space Flight Center)

Poster Number: S-2

Poster – *Space Weather Living History: Connecting the Pioneers, Current Leaders and the Nature of Space Weather with the Public*

**Thompson, Barbara J.** (NASA Goddard Space Flight Center)

Poster Number: S-3

Poster – *Comparison of Prominence Structures with Instances of Flux Rope CMEs in STEREO Data*

**Scherrer, P. H.** (HEPL, Stanford University)

Poster Number: S-4

Poster – *Helioseismology Data Products from SDO for Space Weather Research*

**Bobra, Monica** (Stanford University)

Poster Number: S-5

Poster – *SHARPs - A New Near-Real-Time Space Weather Data Product from Solar Dynamics Observatory*

**Murphy, Joshua** (University of Colorado)

Poster Number: S-6

Poster – *Developing New 3D Visualization Tools for the CISM Models*

**Krista, Larisza D.** (NOAA/SWPC)

Poster Number: S-7

Poster – *The Automated Detection and Analysis of Short-term Changes in Coronal Dimmings*

**Arge, Charles N.** (Air Force Research Laboratory)

Poster Number: S-8

Poster – *Wang Sheeley Arge-Coronal Analysis Tool (WSA-CAT)*

**Falconer, David** (UAH/NSSTC/MSFC)

Poster Number: S-9

Poster – *Forecasting Space Weather from Magnetograms*

**Zucca, Pietro** (Trinity College Dublin)

Poster Number: S-10

Poster – *SolarMonitor.org: Providing access to Solar and Space Weather Data in Near-Realtime*

**Zucca, Pietro** (Trinity College Dublin)

Poster Number: S-11

Poster – *Observations of Low Frequency Solar Radio Bursts from the Rosse Solar-Terrestrial Observatory*

**Bloomfield, D. Shaun** (Trinity College Dublin)

Poster Number: S-12

Poster – *Max Millennium Program, Major Flares, & Your Own Observing Plan*

**Bloomfield, D. Shaun** (Trinity College Dublin)

Poster Number: S-13

Poster – *Solar Flare Forecasting: From Probabilities to Targeted Predictions*

**Fisher, George H.** (Space Sciences Laboratory, UC Berkeley)

Poster Number: S-14

Poster – *Global Forces in Eruptive Solar Flares: The Lorentz Force Acting on the Solar Atmosphere and the Solar Interior*

**Steward, Graham A.** (IPS Radio and Space Services)

Poster Number: S-15

Poster – *Automatic Recognition of Complex Magnetic Regions on the Sun in GONG Magnetogram Images and Prediction of Flares: Techniques for the Flare Warning Program Flarecast*

**Henney, Carl** (Boston College)

Poster Number: S-16

Poster – *Solar Flare Detection with SWIFT and GONG H-alpha Images*

**Henney, Carl** (Boston College)

Poster Number: S-17

Poster – *Forecasting F10.7 with ADAPT*

**Jeong, Cheol-Oh** (ETRI)

Poster Number: S-18

Poster – *Windband Solar Radio Flux Monitor*

**Zhong, Qiuzhen** (National Space Science Center)

Poster Number: S-19

Poster – *SPE Warning Research Based on Real-Time Energetic Particles Flux Data from ACE Satellite*

**Oh, Suyeon** (Chungnam National University)

Poster Number: S-20

Poster – *Forecast of Solar Proton Radiation Intensity Using South Pole Neutron Monitor*

**Kim, Jung-Hoon** (SETsystem, Inc.)

Poster Number: S-21

Poster – *Introducing Solar Wind Observing Facility: Korean IPS Array*

**Davis, Chris** (STFC Rutherford Appleton Laboratory)

Poster Number: S-22

Poster – *HAGRID - a Low-cost Heliospheric Imager Mission for Operational Space Weather*

**Jackson, Bernard V.** (CASS/UCSD)

Poster Number: S-23

Poster – *The 3-D Forecast of Inner Heliosphere Solar Wind Parameters from Remote-sensing and In-situ Data*

## **General Research and Operations (Wednesday)**

**Lanzerotti, Louis** (New Jersey Institute of Technology)

Poster Number: G-1

Poster – *Space Weather: The International Journal of Research and Applications*

**Bonadonna, Michael F.** (Office of the Federal Coordinator for Meteorology)

Poster Number: G-2

Poster – *The National Space Weather Program: Implementing National Capability*

**Kim, Dohyeong** (Korea Meteorological Administration)  
Poster Number: G-3  
Poster – *Current Status and Future Plan for Space Weather Operation in KMA*

**Kim, Yeon-Han** (Korea Astronomy and Space Science Institute)  
Poster Number: G-4  
Poster – *Recent Space Weather Activities in KASI*

**Shi, Liqin** (Chinese Academy of Science)  
Poster Number: G-5  
Poster – *Space Environment Monitoring Network in Chinese Academy of Sciences*

**Xue, Bingsen** (China Meteorological Administration)  
Poster Number: G-6  
Poster – *Recent Progress in Space Weather Forecast in CMA*

**Spann, James F.** (NASA/MSFC)  
Poster Number: G-7  
Poster – *Lessons Learned from Successful Earth Science Research-to-Applications Efforts*

**Zanetti, Lawrence J.** (Johns Hopkins University)  
Poster Number: G-8  
Poster – *Advanced Techniques for Space Weather Predictions*

**Clark, Richard D.** (Millersville University)  
Poster Number: G-9  
Poster – *From Weather to Space Weather: Proficiencies for the Undergraduate*

**Hapgood, Mike** (STFC Rutherford Appleton Laboratory)  
Poster Number: G-10  
Poster – *ESPAS, the Near-Earth Space Data Infrastructure for e-Science*

**Knipp, Delores J.** (University of Colorado)  
Poster Number: G-11  
Poster – *Undergraduate Textbook: Understanding Space Weather and the Physics Behind It*

**Wiltberger, Michael** (NCAR/HAO)  
Poster Number: G-12  
Poster – *The Space Weather Summer School by The Center for Integrated Space Weather Modeling*

**Meier, Matthias M.** (DLR - German Aerospace Center)  
Poster Number: G-13  
Poster – *The Importance of Space Weather Awareness in Airborne Radiation Monitoring after the Nuclear Disaster of Fukushima*

## **Magnetospheric Research and Applications (Wednesday)**

**Liu, Siqing** (Center for Space Science and Applied Research)  
Poster Number: M-1  
Poster – *Improvement of Geomagnetic Disturbance Level Forecast Skill*

**Love, Jeffrey J.** (USGS Geomagnetism Program)  
Poster Number: M-2  
Poster – *Geomagnetic Detection of the Sectorial Solar Magnetic Field and the Historical Peculiarity of Minimum 23–24*

**DiTommaso, Joseph H.** (University Of Alaska, Fairbanks)  
Poster Number: M-3  
Poster – *Analysis of Ground-Based Magnetometer Data for Regional Correlation and Space Wx Risk Assessment*

**Welling, Daniel** (University of Michigan)

Poster Number: M-4

Poster – *Synthetic KP Index from Global Magnetohydrodynamics*

**Hampton, Donald L.** (University of Alaska Fairbanks)

Poster Number: M-5

Poster – *Using Auroral Patch Motion to Measure Magnetospheric Convection - Preliminary Results*

**Urban, Kevin** (New Jersey Institute of Technology)

Poster Number: M-6

Poster – *Synoptic-scale Magnetometer Observations of the Open-closed Field Line Boundary*

**Connor, Hyun Ju** (University of New Hampshire)

Poster Number: M-7

Poster – *Cusp Ion Structures and their Relation to Dayside Reconnection*

**Darnel, Jonathan** (NGDC/CIRES)

Poster Number: M-8

Poster – *Implementation of Space Environmental Anomalies Expert System Real Time*

**Tschan, Christopher R.** (Aerospace Corporation)

Poster Number: M-9

Poster – *Methodology to Determine System Sensitivity to Space Weather*

**Lohmeyer, Whitney** (Massachusetts Institute of Technology)

Poster Number: M-10

Poster – *A Correlation of Space Weather Events to GEO Satellite Anomalies for Improved Fleet System Performance*

**Rachman, Abdul** (LAPAN)

Poster Number: M-11

Poster – *The Study of the Relation Between Space Weather and Satellite Anomalies in Indonesia*

**Rigler, E. Joshua** (HAO/NCAR)

Poster Number: M-12

Poster – *Identifying Space Weather Events Using a Multichannel Statistical Classifier*

**Fennell, Joseph** (The Aerospace Corporation)

Poster Number: M-13

Poster – *Charge Deposition Behind Known Shielding in Highly Inclined Orbits*

**Hartley, David** (Lancaster University)

Poster Number: M-14

Poster – *Electron Observations at GEO During the High Speed Stream (HSS) Commencing on January 6th 2011*

**Rodriguez, Juan V.** (NOAA/NGDC - CIRES)

Poster Number: M-15

Poster – *New Space Weather Particle and Magnetic Field Products at NGDC*

**Kress, Brian T.** (Dartmouth College)

Poster Number: M-16

Poster – *Geomagnetic Cutoffs at Synchronous Altitude Revisited*

**Min, Kyungguk** (New Jersey Institute of Technology)

Poster Number: M-17

Poster – *Properties of Electromagnetic Ion Cyclotron Waves Measured by the THEMIS Mission*

**Nedie, Abiyu** (University of Alberta)

Poster Number: M-18

Poster – *A Field Line Resonance Excited by a Solar Wind Driven Magnetopause Oscillation: Observation and Modelling*

## **Ionospheric Research and Applications (Thursday)**

**Chen, Yanhong** (Center for Space Science and Applied Research)

Poster Number: I-1

Poster – *The Ionosphere Application Research in Space Environment Prediction Center, CSSAR*

**Berdermann, Jens** (DLR - German Aerospace Center)

Poster Number: I-2

Poster – *Recent Efforts Towards an Ionospheric Monitoring and Prediction Center at the German Aerospace Center*

**Paxton, Larry J.** (JHU/APL)

Poster Number: I-3

Poster – *Operational Space Weather from UV Sensing: Current Capabilities and the Way Forward*

**Zhang, Yongliang** (Johns Hopkins University)

Poster Number: I-4

Poster – *A Solar Wind and IMF Driven Empirical Model of Precipitating Electrons in Auroral Oval*

**McCrea, Ian** (STFC Rutherford Appleton Laboratory)

Poster Number: I-5

Poster – *EISCAT\_3D: A Three-dimensional Imaging Radar for Atmospheric and Geospace Research*

**Meehan, Jennifer** (Utah State University)

Poster Number: I-6

Poster – *Improvements to GPS and Communication Technology at USU SWC*

**Messerotti, Mauro** (INAF-Astronomical Observatory of Trieste)

Poster Number: I-7

Poster – *Solar Radio Frequency Interferences to GPS Networks: Analysis of the 24 September 2011 Event*

**Pi, Xiaoqing** (Jet Propulsion Laboratory, California Institute of Technology)

Poster Number: I-8

Poster – *Impact of the COSMIC-2 Mission on Global Assimilative Ionospheric Modeling*

**Yue, Xinan** (UCAR/COSMIC)

Poster Number: I-9

Poster – *Global Ionospheric Electron Density Reanalysis by Multi-Source Data Assimilation*

**Maruyama, Naomi** (NOAA/SWPC and CU/CIRES)

Poster Number: I-10

Poster – *Ionosphere and Plasmasphere Electrodynamics (IPE) Model*

**Ozhogin, Pavel** (University of Massachusetts - Lowell)

Poster Number: I-11

Poster – *Field-aligned Distribution of the Plasmaspheric Electron Density: An Empirical Model Derived from the IMAGE RPI Measurements*

**Cesaroni, Claudio** (Istituto Nazionale Geofisica e Vulcanologia)

Poster Number: I-12

Poster – *Improvements on Ionospheric E-F Valley Model Using Extraordinary Ray: A Preliminary Study*

**Aggarwal, Malini** (Korea Astronomy and Space Science Research Institute)

Poster Number: I-13

Poster – *Multi-technique Observation of Ionospheric Irregularities During Disturbed Period*

**Kinrade, Joseph** (University of Bath)

Poster Number: I-14

Poster – *First Results from a GPS Scintillation Receiver and Co-located All-sky Imager at the Geographic South Pole*

**Danskin, Donald** (Natural Resources Canada)

Poster Number: I-15

Poster – *Radio Wave Absorption Measured During Extreme Proton Events of 2012*

**Huang, Yanshi** (University of Texas at Arlington)

Poster Number: I-16

Poster – *Altitudinal Distribution of Joule Heating and its Influence on the thermosphere*

**Kataria, Dharendra** (University College London)

Poster Number: I-17

Poster – *Nanosatellites for In-situ Studies of the Earth's Ionosphere and Thermosphere – Exploiting the QB50 Mission Opportunity for Space Weather Science*

**Li, Wenhui** (University of New Hampshire)

Poster Number: I-18

Poster – *Thermospheric Density Enhancements During Quiet Time and Storm Time -comparisons Between OpenGGCM-CTIM and CHAMP Observations*

**Kwak, Young-Sil** (Korea Astronomy and Space Science Institute)

Poster Number: I-19

Poster – *Variation of the Hemispheric Asymmetry of the Equatorial Ionization Anomaly with Solar Cycle*

**Scotto, Carlo** (Istituto Nazionale di Geofisica e Vulcanologia)

Poster Number: I-20

Poster – *No Evidence of Long Term Changes of hmF2 in the Ionospheric Data Records*

**Gentile, Louise C.** (Air Force Research Laboratory)

Poster Number: I-21

Poster – *C/NOFS Highlights 2012*

**Thompson, Donald C.** (Air Force Research Laboratory)

Poster Number: I-22

Poster – *Space Environmental NanoSat Experiment (SENSE)*