# 21 June 2006 Wednesday 4-7 PM CEDAR Poster Session #1

## (33 of 75 posters in competition on Ionosphere/Thermosphere, Long-Term Variations, Solar-Terrestrial Interactions, Polar Aeronomy, Irregularities)

- **ITIT** Instruments or Techniques for Ionospheric or Thermospheric Observation (7 of 19 posters in competition)
- LTRV Long-Term Variations of the Upper Atmosphere (3 of 10 posters in competition)
- SOLA Solar Terrestrial Interactions in the Upper Atmosphere (6 of 11 posters in competition)
- **DASS** Data Assimilation (0 of 2 posters in competition)
- **POLA** Polar Aeronomy (2 of 9 posters in competition)
- **MDIT** Midlatitude Ionosphere or Thermosphere (7 of 8 posters in competition)
- EQIT Equatorial Ionosphere or Thermosphere (4 of 8 posters in competition)
- **IRIA** Irregularities of the Ionosphere or Atmosphere (4 of 8 posters in competition)

## Instruments or Techniques for Ionospheric or Thermospheric Observation

- **ITIT-01**, Asti Bhatt, Conjugate photoelectron effects on gyro line and plasma line observed at Arecibo, Student IN poster competition, PhD
- **ITIT-02**, D. Jay Murray, Comparing Measured Altitude Profiles of N2 Lyman-Birge-Hopfield Band Emissions with Model Calculations, Student NOT in poster competition, PhD
- **ITIT-03**, Ryan Seal, The Digital Receiver based Data-Taking and Display System at the Arecibo Observatory, Non-student, Masters, presented by Michael Suzer
- **ITIT-04**, Glynn Germany, CHIRP: Coordinated High-Resolution Ionospheric Receiver Project, Non-student
- ITIT-05, Lloyd Rochester, A Digital Receiver for Meteor Radar Applications, Student IN poster competition, Masters
- **ITIT-06**, Jorge Chau, Electron Density Estimates from Absolute ISR Power at Jicamarca: Preliminary Results, Student NOT in poster competition, presented by Karim Kuyeng
- **ITIT-07**, Duggirala Pallamraju, Investigations of daylit low-energy auroral arcs from Sondrestromfjord, Non-student
- **ITIT-08**, Jeffrey Klenzing, Laboratory Validation of the Ram Wind Sensor for the CINDI Mission of Opportunity, Student IN poster competition, PhD
- **ITIT-09**, Russell Hedden, Variation of twilight low-latitude 732-nm observations with magnetic activity, Student IN poster competition, Undergraduate
- **ITIT-10**, Marcos Diaz, Simulation of the Incoherent Scattering Radar Spectrum in the Auroral Ionosphere, Student NOT in poster competition, PhD
- **ITIT-11**, Mrinal Singh Balaji, Implementation of novel radar modulations on the SuperDARN, Student NOT in poster competition, Masters
- **ITIT-12**, Marco Antonio Milla, Simulations of electron Coulomb collisions under the presence of a DC magnetic field for ISR applications, Student IN poster competition , PhD
- ITIT-13, Paloma Farias Guiterrez, AO SAS Instrumentation Overview, Student NOT in poster competition, PhD
- ITIT-14, Johannes Wiig, AO SAS Instrumentation Overview, Student NOT in poster competition, PhD
- ITIT-15, Romina Nikoukar, A New Amplitude Modulation Technique for F-Region Incoherent Scatter Measurements, Student IN poster competition, PhD

- ITIT-16, Craig Heinselman, Real Time Interaction with Poker AMISR, Non-student
- ITIT-17, John Byrnes, Optical flow studies of the aurora, Student IN poster competition, Masters
- **ITIT-18**, Jonathan J Makela, Characterization of two new miniaturized ionospheric imaging systems, Non-student
- **ITIT-19**, trevor james harris, Implications of O-X mode interference on large HF receive arrays, Non-student

# Long-Term Variations of the Upper Atmosphere

- **LTRV-01**, Ruben Delgado, Characteristics of Mesospheric Sporadic Potassium and Iron Atom Layers Over the Arecibo Observatory, Student IN poster competition, PhD
- LTRV-02, Tzu-Wei Fang, Seasonal Variations of the Equatorial Ionization Anomaly GPS Observations and Model Results, Student IN poster competition, PhD
- LTRV-03, Jose Fernandez, Retrieve of topside parameters from ISR spectrum using Genetic Algorithms, Non-student, PhD
- LTRV-04, Selena Coats, Thermosphere Response to Magnetic Activity: Dependences on Latitude, Season, and Solar Cycle, Student IN poster competition, PhD
- LTRV-05, Rick Niciejewski, The Themosphere Ionosphere Doppler Interferometer (TIDI): contributions from the first 4 1/2 years in orbit, Non-student
- LTRV-06, Elizabeth Kendall, Solar cycle variations of F-layer electron density and ion temperature measured by the Sondrestrom incoherent scatter radar, Non-student
- LTRV-07, Susan Marcelle Nossal, Solar Cycle Influences Seen in Ground-based Geocoronal Hydrogen Measurements, Non-student
- LTRV-08, Pedrina Terra Santos, Study of the meridional neutral winds behavior obtained by the Incoherent Scattering Radar in Arecibo Observatory., Non-student, PhD
- LTRV-09, Christiano Garnett M Brum, Quasi-biannual periodicity detected in the cosmic noise absorption registers over sub-auroral region, Student NOT in poster competition, PhD
- LTRV-10, Christiano Garnett Brum, Neutral Wind Velocity behavior with the solar cycle Over Arecibo, Non-student, PhD, presented by Eva Robles

## Solar Terrestrial Interactions in the Upper Atmosphere

- **SOLA-01**, Alessandro Cerruti, Observed Solar Radio Burst Effects on GPS/WAAS Carrier-to-Noise Ratio, Student NOT in poster competition, PhD
- **SOLA-02**, Amanda Johnson, Day-to-day Variability of the E-layer, Student IN poster competition, Undergraduate
- SOLA-03, Takuya Tsugawa, Study of Sudden Increases in Total Electron Content Induced by Solar Flares Using Observations and Models, Non-student, PhD
- **SOLA-04**, Xiaohua Fang, Quantification of global 30-240 keV proton precipitation pattern change in the 17-18 April 2002 storms, Non-student
- **SOLA-05**, Xiaoni Wang, The short-term relationship between the equatorial peak electron density and the solar irradiance , Student IN poster competition , PhD
- SOLA-06, David John Pawlowski, Global model simulations using the TIMED solar EUV experiment, Student IN poster competition, PhD
- SOLA-07, Amita Muralikrishna, Looking for Rules in Geomagnetic Storm Occurrence Using the Decision Tree Technique, Student IN poster competition, Masters
- SOLA-08, Pablo M. Reyes, Study of a X17 solar flare effects observed over Jicamarca on Sep 07 2005, Student IN poster competition, Masters

- **SOLA-09**, Michael J. Holliday, Modeling Sudden Impulse Events in the High Latitude Ionosphere, Non-student, Masters, presented by Simon Shepherd
- SOLA-10, Maria M Kuznetsova, Community Coordinated Modeling Center Support of the CEDAR Science Campaigns, Non-student
- SOLA-11, Eric Sutton, Thermospheric Density Response from Solar Flares, Student IN poster competition, Masters

## **Data Assimilation**

- **DASS-01**, Gary Bust, Recent Result from Ionospheric Data Assimilation Three-Dimensonal (IDA3D), Non-student
- **DASS-02**, Geonhwa Jee, Continual initialization of a coupled thermosphere-ionosphere forecast model by an ionospheric data assimilation model, Non-student

## **Polar Aeronomy**

- **POLA-01**, Larry Gardner, Three-Dimensional High-Resolution Storm-Time Simulation of the Ion and Neutral Polar Winds, Non-student, PhD
- **POLA-02**, Yue Deng, The role of vertical ion convection in the high-latitude ionospheric plasma distribution, Student NOT in poster competition, PhD
- **POLA-03**, Kelly Ann Drake, A Comparison of the Cross Polar Cap Potential Drop During Steady State versus Non-Steady State During Southward IMF Conditions, Student IN poster competition, PhD
- POLA-04, Tomoko Matsuo, Multi-resolution analysis of aurora images, Non-student
- **POLA-05**, Eric Schoen Johnson, Contributions of Spatial and Temporal Ion Drift Variability to the Joule Heating Rate during Southward IMF, Student NOT in poster competition, PhD
- **POLA-06**, Eric M Lundell, Development of Resonance Lidar for Studying the Auroral Thermosphere, Student IN poster competition, PhD
- **POLA-07**, Qian Wu, Neutral Atmosphere dynamics: A Fabry Perot Interferometer at Concordia, Non-student
- **POLA-08**, John W. Meriwether, Plans for ion-neutral coupling studies utilzing the Alaskan Fabry-Perot Interferometer network and the AMISR radar, Non-student
- **POLA-09** (displayed with IRIA-06) Parametric dependence of electric field variability in the Sondrestrom data base: a linear relation with Kp by Russell Cosgrove, Non-student

## Midlatitude Ionosphere or Thermosphere

- **MDIT-01**, Nobuki Kotake, Statistical study of medium-scale traveling ionospheric disturbances observed with GPS networks in Japan and Southern California, Student IN poster competition, PhD
- **MDIT-02**, Tanya Rae Phillips, Data and Model Comparison of the Neutral Temperature and Composition Based on Incoherent Scatter Radar, Student IN poster competition, Undergraduate
- **MDIT-03**, Steve Watchorn, Studies of Neutral Oxygen via Bowen Fluorescence using Spatial Heterodyne Spectroscopy, Non-student, PhD
- **MDIT-04**, Michael Nicolls, Measurements and Modeling of the Daytime Molecular Ion Composition in the F1 Region over Arecibo, Student IN poster competition, PhD
- MDIT-05, Preeti Bhaneja, Midlatitude Spread F, Student IN poster competition
- **MDIT-06**, Sasmita Mohapatra, The Behavior of Ionospheric Zonal Ion Drifts at Middle Latitudes, Student IN poster competition, PhD

- MDIT-07, Dorey Joseph Livneh, Thermospheric Waves Over Arecibo, Student IN poster competition, PhD
- **MDIT-08**, ILGIN SEKER, Categorization of the Events Observed by the Penn State Allsky Imager at Arecibo Observatory, Student IN poster competition, PhD

# **Equatorial Ionosphere or Thermosphere**

- **EQIT-01**, Esayas Shume, Zonal winds inferred from height varying type I and II echoes at Jicamarca, Student NOT in poster competition, PhD
- EQIT-02, Jyoti R Nair, Role of thermospheric meridional winds on the occurrence/non-occurrence of equatorial spread F , Student IN poster competition , PhD
- EQIT-03, Ethan S Miller, Coordinated space- and ground-based observation of equatorial spread-F in the central Pacific, Student IN poster competition, PhD
- EQIT-04, Marcio Muella, Simultaneous GPS Measurements of TEC, Scintillation and Ionospheric Irregularities Zonal Drift Velocity at Equatorial and Low-Latitude Regions, Student NOT in poster competition, PhD
- **EQIT-05**, Michael Faivre, A new approach to the observations of equatorial thermospheric dynamics, Non-student, PhD
- **EQIT-06**, Carlos Martinis, Imaging studies of ionospheric irregularities near the Arecibo conjugate point, Non-student, PhD
- EQIT-07, Sung Hong Park, Retrieval of the Plasma Drift Velocity through Image Processing, Student IN poster competition, Undergraduate
- **EQIT-08**, Edgardo E. Pacheco, Analysis of the Response of Vertical Drifts to Geomagnetic Activity at Equatorial Latitudes During Storm-time Periods Using DMSP and ROCSAT Data, Student IN poster competition, Masters

## Irregularities of the Ionosphere or Atmosphere

- **IRIA-01**, Caroline Yount, Occurrence frequency of convective rolls in the mesopause and lower thermosphere region, Student IN poster competition, Undergraduate
- IRIA-02, Anthony Musumba Mwene, F region Ionospheric Density Irregularities from DE-2 Observations at Low and Midlatitudes, Student IN poster competition, PhD
- IRIA-03, Natalia A Gondarenko, A Theory for Polar Cap Patch Formation, Non-student, presented by Parvez Guzdar
- **IRIA-04**, Chen Chen, Statistics discrete charging model for active perturbation of plasma irregularities associated with charged dust in the summer polar mesosphere, Student IN poster competition, PhD
- **IRIA-05**, Josef Drexler, Combined radar observations of equatorial electrojet irregularities at Jicamarca, Non-student
- **IRIA-06**, Russell Cosgrove, Spontaneous generation of 100-km-scale midlatitude electric fields by a sporadic E layer, and the effect on the F layer, Non-student
- IRIA-07, Kuo-Feng Yang, A study of Frozen-in property of Field-aligned Irregularities in Ionospheric Sporadic E region using Chung-Li VHF Radar, Student NOT in poster competition, PhD
- **IRIA-08**, Erin H Lay, Implications for Ionospheric Electron Densities from Local Time Variation in Lightning Activity as Measured by the World Wide Lightning Location Network, Student IN poster competition, PhD