The Department of Atmospheric and Environmental Sciences
Faculty, Graduate Student and Post-Doc Sessions
**Monday**

**Session 1B**  
*African Weather and Climate I*  
*Location: Miramar 1 & 2 (The Condado Hilton Plaza)*  
9:00 AM *Saharan Dust and the Nonlinear Evolution of the African Easterly Jet–African Easterly Wave System*  
Dustin Grogan, Univ. of California, Davis, CA; and T. Nathan and S. H. Chen  
9:30 AM *Three-Dimensional Structure of African Easterly Waves based on Empirical Orthogonal Functions*  
Yuan-Ming Cheng, University at Albany, State University of New York, Albany, NY; and C. D. Thorncroft

**Session 2B**  
*African Weather and Climate II*  
*Location: Miramar 1 & 2 (The Condado Hilton Plaza)*  
11:15 AM *On the Influence of Convectively Coupled Kelvin Waves on African Easterly waves*  
Chris D. Thorncroft, SUNY, University at Albany, Albany, NY  
11:45 AM *Assessing the Predictability of African Easterly Waves in ECMWF Ensemble Forecasts*  
Travis J. Elless, University at Albany, SUNY, Albany, NY; and R. D. Torn

**Session 2C**  
*HS3 II*  
*Location: Ponce de Leon B (The Condado Hilton Plaza)*  
10:30 AM *Impact of Environmental Moisture for TC Genesis from AEWs*  
Alan Brammer, SUNY, Albany, NY; and C. D. Thorncroft  
10:45 AM *Dry Air, Midlevel Flow, and the Establishment of Persistent Deep Convection prior to Tropical Cyclogenesis*  
Charles N. Helms, SUNY Albany, Albany, NY; and L. Bosart  
12:00 PM *An Analysis of the Tropical Cyclone Cirrus Canopy Using HS3 and TCI Observations*  
Patrick Duran, University at Albany, SUNY, Albany, NY; and J. Molinar

**Session 2D**  
*TC Genesis II*  
*Location: Ponce de Leon A (The Condado Hilton Plaza)*  
10:30 AM *The Influence of an Upper Tropospheric Potential Vorticity Anomaly on Rapid Tropical Cyclogenesis*  
Michael S. Fischer, University at Albany, SUNY, Albany, NY; and B. Tang  
10:45 AM *The Influence of a Precursor Central American Gyre and a Northerly Surge into the Gulf of Tehuantepec on the Formation of Hurricane Patricia in October 2015*  
Lance F. Bosart, SUNY, Albany, NY; and P. P. Papin, A. S. Levine, and A. M. Bentle  
5:45 PM *Sensitivity of Tropical Cyclone Spinup Time and Convection to the Initial Entropy Deficit*  
Joshua J. Alland, University of Albany, Albany, NY; and B. Tang

**Tuesday**

**Session 5D**  
*Tropical Cyclone Intensity I: Observations of Tropical Cyclone Intensity*  
*Location: Ponce de Leon A (The Condado Hilton Plaza)*  
8:30 AM *Understanding the Relationship Between Lightning Outbreaks and Tropical Cyclone Intensity Change*  
Stephanie N. Stevenson, University at Albany, SUNY, Albany, NY; and K. Corbosier

**Session 7B**  
*Tropical Extratropical Interactions I*  
*Location: Ponce de Leon B (The Condado Hilton Plaza)*  
2:30 PM *An Analysis of Tropical Moisture Transport During Agricultural Drought Transition Periods Over the United States Corn Belt Region*  
Nicholas Joseph Schiraldi, SUNY, Albany, NY; and P. E. Roundy

**Session 7C**  
*Tropical Cyclone Intensity III: Dynamics of Tropical Cyclone Intensification*  
*Location: Ponce de Leon A (The Condado Hilton Plaza)*  
2:00 PM *What is the Role of Deep Convection in the Intensification of Tropical Cyclones?*  
John E. Molinari, University at Albany/SUNY, Albany, N
Wednesday

Session 9D **Tropical Cyclone Intensity IV: Tropical Cyclone Intensity and Shear**
Location: Ponce de Leon C (The Condado Hilton Plaza)
8:45 AM Climatological Analysis of Tropical Cyclone Intensity Changes under Moderate Vertical Wind Shear
Rosimar Rios-Berrios, University at Albany/SUNY, Albany, NY

Session 9A **HFIP I**
Location: Ponce de Leon A (The Condado Hilton Plaza)
9:00 AM Diagnosing Atmospheric Conditions Associated with Large Short-Term Intensity Forecast Errors in the Hurricane Weather Research and Forecasting (HWRF) Model
Daniel J. Halperin, University at Albany, Albany, NY; and R. D. Torn

Session 10D **Tropical Cyclone Intensity V: External Influences on Tropical Cyclone Intensity**
Location: Ponce de Leon C (The Condado Hilton Plaza)
11:45 AM REVISITING TROUGH INTERACTIONS AND TROPICAL CYCLONE INTENSITY CHANGE
Casey M. Peirano, University at Albany, SUNY, Albany, NY; and K. L. Corbosiero

Session 11B **Large Scale Circulation**
Location: Miramar 1 & 2 (The Condado Hilton Plaza)
3:15 PM Analysis of angular momentum loss in weather prediction models
Ernesto W. Findlay, University at albany, Albany, NY

Session 12D **Tropical Extratropical Interactions II**
Location: Ponce de Leon C (The Condado Hilton Plaza)
4:30 PM An Analysis of Multiple Steering Influences on the Track of Tropical Cyclone Joaquin (2015)
Philippe P. Papin, University at Albany, SUNY, Albany, NY; and R. D. Torn

Session 12A **Tropical Cyclone Structure II: Precipitation Processes**
Location: Ponce de Leon A (The Condado Hilton Plaza)
4:30 PM Further Evidence of the Tropical Cyclone Diurnal Cycle

Thursday

Session 13A **HFIP III**
Location: Ponce de Leon C (The Condado Hilton Plaza)
8:00 AM Evaluating the Predictability of TC Intensity Using the HWRF Ensemble Prediction System
Ryan D. Torn, University at Albany, SUNY, Albany, NY

Session 13D **TC Genesis III**
A Coupled Moist Entropy and Angular Momentum Framework for Tropical Cyclogenesis Investigations
Brian Tang, SUNY, Albany, NY

Tropical Cyclone Rainbands and Precipitation II
Location: Miramar 1 & 2 (The Condado Hilton Plaza)
10:45 AM Ensemble Variability in Rainfall Forecasts of Hurricane Irene (2011)
Molly B. Smith, University at Albany, Albany, NY; and R. D. Tom, K. L. Corbosiero, and P. Pegin

Posters

154 Relating Mid-Level Meridional Water Vapor Transport by Stationary Eddies to Seasonal Atlantic Tropical Cyclone Activity
Travis J. Elless, University at Albany, SUNY, Albany, NY; and S. N. Stevenson, B. Tang, and R. D. Tom

166 The Tropical Cyclone Genesis Index (TCGI)
Jason Dunion, NOAA/AOML/HRD, Miami, FL; and J. Kaplan, A. B. Schumacher, J. Cossuth, K. D. Musgrave, and P. Leighton

Friday

Session 17A Tropical Cyclone Structure IV: Secondary Eyewall Formation/Eyewall Replacement Cycles
Location: Ponce de Leon A (The Condado Hilton Plaza)
8:30 AM Diagnosis of Secondary Eyewall Formation Mechanisms in Hurricane Igor (2010)
Kristen L. Corbosiero, University at Albany/SUNY, Albany, NY; and R. D. Tom

Session 17B Intraseasonal Variability III
Location: Miramar 1 & 2 (The Condado Hilton Plaza)
8:30 AM Western Hemisphere Extratropical Circulation and the Indian Ocean MJO
Paul E. Roundy, SUNY, Albany, NY
9:00 AM Relative Feedbacks between the Madden–Julian Oscillation and Tropical Cyclones
Lawrence C. Gloeckler, SUNY, Albany, NY; and P. E. Roundy

Session 18B Intraseasonal Variability IV
Location: Miramar 1 & 2 (The Condado Hilton Plaza)
11:15 AM Extratropical Convective Precursors to Initiation of MJO Convection Over the Indian Ocean
Jennifer A. Gahtan, University at Albany-SUNY, Albany, NY; and P. E. Roundy

Session 18A Tropical Cyclone Structure V: 3-D Structure
Location: Ponce de Leon A (The Condado Hilton Plaza)
11:30 AM The Composited Tropical Cyclone Outflow Layer and the Balanced Vortex Response
Sarah Dunn Ditchek, University at Albany, SUNY, Albany, NY; and J. E. Molinari
12:00 PM Simulation of the Downshear Reformation of a Tropical Cyclone
Leon Nguyen, University at Albany/SUNY, Albany, NY; and J. E. Molinari