

Program

8:00 AM

REGISTRATION AND BREAKFAST

8:30 AM

WELCOME:

HÉCTOR JIMÉNEZ, PHD – HEAD OF THE
DEPARTMENT OF PHYSICS

MOISÉS ORENGO, PHD – DEAN, FACULTY OF ARTS
AND SCIENCES

JORGE IVÁN VÉLEZ, PHD – CHANCELLOR UPRM

ISRAEL MATOS, MIC – DIRECTOR, NATIONAL
WEATHER SERVICE - SAN JUAN OFFICE

9:00 AM

STUDENT'S PRESENTATIONS

1. ***Discriminate between severe weather (tornado and non-tornado) environments to improve severe weather forecasting in the Mid-South***

Student: **Néstor S. Flecha (Physics)**

Mentors: Jonathan L. Howell, Scott J. McNeil, Kati R. McNeil,
Chris C. Duke from Weather Forecast Office (WFO) - Memphis, TN

2. ***Vulnerability of the Hispanic Community to Severe Weather: some counties of Arkansas***

Student: **Luis D. Padilla (Physics)**

Mentor: Nelson de Villier from WFO-Little Rock, AR

3. ***Implementation and validation of the Advanced Research - Weather and Research Forecasting (ARW) system for enhanced wind forecasting in Puerto Rico***

Student: **Juan O. González (Mathematics)**

Mentor: Julio Morell (UPRM-Marine Sciences)

4. ***AVHRR data collection and processing in TeraScan station***

Student: **Adriana Meléndez (Electrical Eng.)**

Mentor: Pieter Van der Meer (Mechanical Eng.)

5. *Synoptic Patterns from 1950 to 2003 that favor snow-fall events in New Mexico with special focus on Bernalillo County*

Student: **Carlos M. Anselmi (Physics)**

Mentor: Brent Wachter (WFO -Albuquerque, NM)

6. *Flood Climatology Meeting*

Student: **Odalys Martínez (Physics)**

Mentors: Ana Maria Hagan, Jeffrey Dobur, Brad Gimme-staed, John Feldt, Marc Love (WFO-Peachtree, GA)

7. *The Impact of the Saharan Air Layer on Atlantic Tropical Cyclone Activity*

Student: **Cristimer González (Physics)**

Mentor: Jason P. Dunion (NOAA-Atlantic Oceanographic and Meteorological Laboratory, Miami)

8. *El Nino Southern Oscillations and the Atlantic Warm Pool as Predictors for Atlantic Hurricane Activity*

Student: **Noraica Dávila (Electrical Eng.)**

Mentor: David B. Enfield (NOAA Atlantic Oceanographic and Meteorological Laboratory, Miami)

9. *Rainfall Response Study for Fisheating Creek Basin at Palmdale*

Student: **Julieta Gómez (Civil Eng.)**

Mentor: Rusty Pfoost and Pablo Santos (WFO-Miami)

10. *Comparison of TRMM NASA satellite-based rainfall estimates with radar and land-based gauges in Puerto Rico (1998—2001)*

Student: **Lizeidy Nieves (Civil Eng.)**

Mentor: Miguel Pando (UPRM - Civil Eng.)

11. *Comparison of TRMM NASA satellite-based rainfall estimates with radar and land-based gauges in Puerto Rico (2002–2005)*

Student: **Thais Alicea(Geology)**

Mentor: Miguel Pando (UPRM – Civil Eng.)

12. *Climatology of hurricanes in Corpus Christi*
Student: **Emmanuel Martínez (Physics)**
Mentor: Scott Cordero (WFO - Corpus Christi, TX)

12:00 - 1:00

LUNCH

13. *A Classic Severe Weather Setup: the 21 April 2007 Texas Panhandle Tornado Outbreak*

Student: **José G. Conde (Mathematics)**
Mentor: Matthew Kramar (WFO - Amarillo, TX)

14. *Zone Forecast Verification for PRZ010*

Student: **David Sánchez (Mathematics)**
Mentor: Israel Matos (NWS-San Juan)

15. *Zone Forecast Verification for PRZ008*

Student: **Eduardo García (Electrical Eng.)**
Mentor: Israel Matos (NWS-San Juan)

16. *A Gulf of Mexico Tropical Cyclone Climate Study Using ENSO and QBO as Determinants*

Student: **David Navarro (Physics)**
Mentor: Robert J. Ricks Jr. (WFO - Slidell, LA)

17. *Relative humidity and temperature as a way to validate heat index critical events and its impacts on the community's health*

Student: **Janice Maldonado (Physics)**
Mentors: Paul Trotter and Dana Griffin (WFO - Slidell, LA)

18. *Convection Parameters during Heat Wave Events and Impact of OHSAS on the Media*

Student: **Myrna Santiago (Biology)**
Mentors: Paul Trotter and Dana Griffin (WFO - Slidell, LA)

19. *Systematic Study of Rain Water: The Quality of Rain water in Mayaguez City*

Student: **Cynthia Caraballo (Chemical Eng.)**
Mentor: Maritza De Jesús (UPRM-Chemistry)

20. *Summer distribution of total suspended particles: Air Quality in Mayagüez city*

Student: **Jamaris Benítez (Electrical Eng.)**
Mentor: Maritza De Jesús (UPRM-Chemistry)

21. *Attenuation of ultraviolet and visible radiation by aerosols in Saharan dust events reaching southwestern Puerto Rico*

Student: **Ashley F. Cruz (Industrial Eng.)**
Mentor: Yasmín Detrés (UPRM-Marine Sciences)

22. *Image and data analysis of aerosol products during Saharan dust events*

Student: **Michelle Vega (Chemical Eng.)**
Mentor: Yasmín Detrés (UPRM-Marine Sciences)

23. *Calculating ET, water and CO2 fluxes from Eddy Covariance System*

Student: **José G. Pérez (Mathematics)**
Mentor: Luis R. Pérez (UPRM-Agricultural and Biosystems Eng.)

24. *Hurricanes in Shreveport, LA History (1940-2006)*

Student: **Jennifer M. Colón (Physics)**
Mentor: Nicholas Fillo and Jim Derry (WFO-Shreveport LA)

25. *The June 2007 Texas Flooding Event seen from an Impact Weather Perspective*

Student: **Héctor Pérez (Physics)**
Mentor: Bernard N. Meisner (WFO-Fort Worth, Texas)

26. *Environmental conditions that led to the June 4th, 2007 hail and wind storm*

Student: **Billy A. Rivera (Physics)**
Mentor: Navejar Felix (WFO-Lake Charles, LA)

27. *El Niño and La Niña Phenomenon Study for the Huntsville, AL Area (2007)*

Student: **Ismari Ramos (Physics)**
Mentor: Kristopher White (WFO-Huntsville, AL)