

# Third Northeast Tropical Workshop

June 18 – 20 2007

[Endicott House](#)

Dedham, Massachusetts

## **Workshop Program**

[\(Click here for .pdf file of program\)](#)

## **Sunday, June 17**

**Afternoon: Check-in**

**6:00: Reception, Gun Room**

**7:00: Dinner, Dining Room**

## **Monday, June 18**

### **1. Tropical cyclogenesis** *Kerry Emanuel, Session Chair*

**7:15 – 8:15: Breakfast, Dining Room**

**8:30 – 10:00: Presentations**

[Convective oscillations in a strongly sheared tropical cyclone](#) – Jaclyn Frank and John Molinari

[Thoughts on tropical cyclogenesis](#) – John Molinari

[Cyclogenesis via Rossby wave radiation from extant tropical cyclones](#) – Kyle Krouse, Adam Sobel and Lorenzo Polvani

[Climatology of tropical cyclogenesis](#) – Ron McTaggart-Cowan, Glenn Deane, Lance Bosart, Chris Davis and Tom Galarneau, Jr.

**10:00 – 10:30: Break**

**10:30 – 11:30: Discussion of tropical waves and cyclogenesis**

**12:00 – 1:30: Lunch, Endicott Terrace**

### **2. Waves, convection, and cyclogenesis** *John Molinari, Session Chair*

**1:30 – 2:45: Presentations**

[Role of African easterly waves and embedded vorticity features in genesis of tropical cyclones over the eastern tropical Atlantic](#) – Susanna Hopsch

[Evidence for convectively coupled Kelvin waves over Equatorial Africa: A strong and unique signal over the tropics](#) – Hanh Nguyen

[Convectively coupled Kelvin waves over tropical Africa during the boreal summer: Structure and variability](#) – Ademe Mekonnen and Chris Thorncroft

**2:45 – 3:15: Break**

### **Waves, convection, and cyclogenesis – continued**

**3:15 – 4:30 Presentations**

[Modeling the interaction between cumulus convection and linear waves in a limited domain cloud system resolving model](#) – Zhiming Kuang

[A case study of an outbreak of twin tropical cyclones](#) – Carl Schreck

[Effects of Equatorially-Trapped Tropical Waves on Tropical Cyclogenesis: High Resolution Simulations in Idealized Conditions](#) – Jeff Gall and William Frank

**4:30 – 5:30: Discussion of waves, convection, and cyclogenesis**

**6:00: Reception, Gun Room**

**7:00: Dinner, Dining Room**

## **Tuesday, June 19**

**7:15 – 8:15: Breakfast, Dining Room**

**3. Tropical dynamics** *Adam Sobel, Session Chair*

**8:30 – 10:15: Presentations**

[Mechanisms of the seasonal intensification of the Somali jet](#) – Bill Boos

[Experiments and analysis of a dry hurricane](#) – Agnieszka Mrowiec, Olivier Pauluis and Steve Garner

[The Madden-Julian oscillation and its interactions with Pacific Ocean Kelvin waves](#) – Paul Roundy

[A tale of two efficiencies](#) – Olivier Pauluis

[Verification of deterministic tropical cyclone intensity forecasts: Moving beyond mean absolute error](#) – Jon Moskaitis

**10:15 – 10:45: Break**

**10:45 – 11:45: Discussion of tropical dynamics**

**12:00 – 1:30: Lunch, Endicott Terrace**

**4. Tropical cyclones and climate**     *Olivier Pauluis, Session Chair*

**1:30 – 2:45: Presentations**

[Statistical assessments of paleo-storm records: A case study from the Northeastern Caribbean](#) – Jon Woodruff, Jeff Donnelly, and Kerry Emanuel

[A paleorecord of hurricane storm surges in New England](#) – Phil Lane and Jeff Donnelly

[High-resolution paleotempestology: Cave records of tropical cyclone precipitation events](#)  
– Amy Frappier

**2:45 – 3:15: Break**

**Tropical cyclones and climate – continued**

**3:15 – 4:10: Presentations**

[Tropical cyclone genesis potential index in climate models](#) – Suzana Camargo, Adam Sobel, Anthony Barnston, and Kerry Emanuel

[Downscaling tropical cyclone climatologies from global re-analyses and climate models](#) – Kerry Emanuel

**4:10-5:30: Discussion of tropical cyclones and climate**

**6:00: Reception, Gun Room**

**7:00: Dinner, Dining Room**

## Wednesday, June 20

**7:00 – 8:00: Breakfast, Dining Room**

**5. External influences on tropical cyclones**     *Lance Bosart, Session Chair*

**8:00 – 9:15: Presentations**

[Effects of the Madden-Julian Oscillation on the Cyclogenesis of Hurricane Emily \(2005\)](#) – Stephanie Zick and William Frank

[Eddies in an axisymmetric hurricane model: Alteration of thermodynamic structure and implications for intensity](#) – Brian Tang

[The Katrina \(2005\) ET and its Impact on the Large-Scale Environment](#) – Ron McTaggart-Cowan, Lance F. Bosart, John R. Gyakum and Eyad H. Atallah

**9:15 – 9:45: Break**

**9:45 – 10:30: Discussions of external influences in tropical cyclones**

**6. Tropical cyclone modification and air-sea interaction** *Paul Roundy, Session Chair*

**10:30 – 11:45: Presentations**

[Hurricane Modification Study](#) – Isaac Ginis

[Improving the Initialization of Coupled Hurricane-Ocean Models by Feature-Based Assimilation of Mesoscale Oceanic Features](#) – Richard Yablonsky and Isaac Ginis

[Movie](#)

[Paper](#)

[Effects of Surface Waves on Air-sea Momentum and Energy Fluxes and Ocean Response to Hurricanes](#) -- Yalin Fan and Isaac Ginis

**11:45 – 12:30 Discussion of tropical cyclone modification and air-sea interaction**

**12:30: Lunch, Dining Room**

**Workshop ends**