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# MMM SEMINAR NCAR

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## Hurricane Formation

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A century ago, there were two competing theories of hurricane formation. One theory held that the incipient hurricane resulted from the kinematic effect of circulation increase in the convergence of counter-flowing air streams: westerlies near the equator and easterlies to the north. The other idea held that the hurricane was initiated by deep convection over warm tropical oceans, essentially a thermodynamic view. Research during the ensuing century has grappled with the coupling of thermodynamics and vorticity dynamics. In this talk, results of recent observational campaigns will be summarized, with emphasis on the Pre-Depression Investigation of Cloud Systems in the Tropics (PREDICT). Based primarily on these observations, I will show how mesoscale circulation dynamics guide the organization and transformation of deep, moist convection that, in turn, drives the changes in circulation we associate with tropical cyclone (hurricane) formation.

*This seminar will be recorded and available via webcast at:  
<http://www.fin.ucar.edu/it/mms/fl-live.htm>*

**Thursday, 5 December 2013, 3:30 PM**

Refreshments 3:15 PM

NCAR-Foothills Laboratory

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