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MMM SEMINAR

Please join us in welcoming , **Ángel Francisco Adames Corraliza**, University of Wisconsin-Madison, for our upcoming MMM Seminar Series.

MMM Seminar @ 2:00PM,

Refreshments @ 1:45PM

Please also join colleagues for refreshments and informal discussion after the seminar until 3:30PM.

Participants watching the live webcast may ask questions during the seminar via Slido. This seminar will be hybrid, you may attend in-person or watch the **live webcast**.

Add to Calendar

Oct. 29, 2026

Location: FL2-1022, Large Seminar Auditorium

Moist thermodynamic constraints on large-scale tropical circulations

Ángel Francisco Adames Corraliza
University of Wisconsin-Madison
MacArthur Fellow

The constraints on tropical motions arising from lower tropospheric convective quasi equilibrium (CQE), the weak temperature gradient (WTG) approximation, and entraining convection are examined.Linear solutions to a highly idealized model show that the high cloud density of the lower free troposphere (LFT,600-950 hPa) allows gravity waves to quickly adjust the temperature of the cloud-free environment to that of the clouds. As a result, a form of LQE arises in which buoyancy is quasi-conserved as it follows the horizontal flow...

Link to Full Abstract

**The visiting faculty is sponsored by the EdEC Faculty Fellowship Program