

Ben-Gurion University of the Negev Blaustein Institutes for Desert Research The Swiss Institute for Dryland Environmental and Energy Research Alexandre Yersin Department of Solar Energy and Environmental Physics

Title: **The dynamics of Inter Tropical Convergence Zones in present and past climates**

Speaker:

Dr. Ori Adam

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Abstract:

Rain in the tropics tends to concentrate in narrow Inter Tropical Convergence Zones (ITCZs) with strong convergence of moist static energy (MSE) below and strong divergence of dry static energy aloft. Recent studies provide energetic constraints for the position of the ITCZ by relating it to the atmospheric energy budget.

We examine the relation of the seasonally and regionally varying ITCZ and the atmospheric energy budget in observations, climate models, and simulations of past climates. The analysis provides insights onto the drivers of seasonal variations in the present climate, tropical precipitation biases in climate models, and tropical circulations in past climates.

> Tuesday, June 13, 2017, 11:00 Lecture room, Physics Building (ground floor)