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APPLIED MATHEMATICS SEMINAR 291

The Mathematics of Tropical Atmospheric Waves

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Date: **5/4/18**
Time: **3:00 PM**
Location: **COB1 267**

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ABSTRACT

In this talk I will introduce the audience to waves in the tropical atmosphere. I will discuss various results of mine and my collaborators regarding the structure, linear dynamics, and nonlinear dynamics of these waves. In particular, I will focus on three waves - equatorially trapped Rossby waves, the equatorial Kelvin wave, and the as-of-yet to be understood Madden-Julian Oscillation. Pictures, PDEs, and asymptotic analysis will be employed.

BIO:

Dr. Joseph Biello got his BA at Columbia in 1994, then Part III Math Tripos in 1995 in King's College Cambridge. He earned his PhD in Astrophysics in 2001 in Chicago.

He did a post-doc at RPI and NYU, and he's a professor at UC Davis since 2005. He was a visiting professor in Paris in 2012, and at CWI in Amsterdam in 2012. Dr. Joseph Biello is interested in fluid dynamics, PDE, asymptotic methods, especially to describe tropical Atmospheric waves. Long time swimmer, recent sailor. Father of 2 awesome daughters.