

# Special Colloquium



UCR

Mathematics

Department

**DR. DAVID WEISBART**

**UC LOS ANGELES**

**"DIFFUSION AND QUANTUM THEORY IN THE  $p$ -ADIC SETTING"**

**&**

**"COLLABORATION AND COOPERATION IN THE REAL AND VIRTUAL CLASSROOM"**

The study of non-archimedean analogues of physical theories was originally motivated by the apparent breakdown of the geometry of spacetime below the Planck scale. We can formulate physical theories in, for example, a  $p$ -adic setting by analogy to the real setting. The question is: Do analogous theories have analogous features? We will consider some examples of analogous features in the theory of finite approximations of quantum systems, in the study of diffusion, and in the classification of elementary particles.

Adopting a culture of inclusion and cooperation will markedly improve student learning and growth. We will discuss the benefits of collaborative learning and some advances in technology that make it possible to create successful collaborative learning environments in large lectures and in online courses.

**Thursday, January 29th, 2015**

**Room 284, the 2nd Floor of the Surge Building**

**Tea Time @ 3:40 p.m.**

**Talk Begins @ 4:10 p.m.**

**Ends @ 5:00 p.m.**

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