

Archived Colloquia

2008/09

October 10, 2008: James Feigenbaum (University of Pittsburg)

Title: *Can Physics Explain the Stock Market?* ([Flyer](#))

Abstract: A large number of papers have been written by physicists documenting an alleged signature of imminent financial crashes involving so-called log-periodic oscillations, which are periodic with respect to the logarithm of the time to the crash. I will describe two models that attempt to explain this phenomenon, the Johansen-Ledoit-Sornette bubble model and the Chang-Feigenbaum tension model, and discuss how these models have fared under statistical testing, both by classical and Bayesian methods.

April 24, 2009: Cindy Wyels (CSU Channel Islands)

Title: *Student Accessible Problems in Graph Labeling* ([Flyer](#))

Abstract: Radio labeling of graphs consists of assigning positive integers (frequencies) to the vertices (transmitters) so as to satisfy a specific condition (avoid signal interference). I'll introduce radio labeling through definitions, examples, and audience participation. I'll then provide an overview of student contributions to this area of research and discuss open questions that could become the focus of future student investigations.

May 8, 2009: John P. D'Angelo (University of Illinois at Urbana-Champaign)

Title: *Complex Geometry: Is it too complex to teach to freshmen?* ([Flyer](#))

Abstract: The talk will give an introduction to the beautiful subject of complex geometry and will include assessments on how suitable such a class can be to teach to lower division undergraduate students based on a course given at the University of Illinois, Urbana Champaign.