



**2007 - 2008**  
**MATHEMATICS DISTINGUISHED**  
**LECTURER SERIES**  
**UNIVERSITY OF CENTRAL FLORIDA**



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**Professor Thomas Kurtz**  
**Department of Mathematics and**  
**Department of Statistics**  
**University of Wisconsin - Madison**

will speak on

**Stochastic models for chemical reactions**

**ABSTRACT:** Attempts to model chemical reactions within biological cells have led to renewed interest in stochastic models for these systems. The classical stochastic models for chemical reaction networks will be reviewed, and multiscale methods for model reduction will be described. The methods will be illustrated with derivation of the Michaelis-Menten model for enzymereactions and a simple model of viral infection of a cell.

**DATE:** **Thursday, February 14, 2008**

**TIME:** **10:30 – 11:30am**

**PLACE:** **MAP 318**

Refreshments will be served