

Tim Elston  
Applied Mathematics Program  
University of North Carolina-Chapel Hill

Title: Stochastic Effects in Signaling Pathways

Fluctuations due to the stochastic nature of biochemical reactions are an inherent property of all biochemical networks. This talk will provide an introduction to the mathematical and computational methods used to understand stochastic effects in signaling pathways. Different mechanisms for converting a graded response to a binary ('all or none') response will be discussed, and the mating pheromone signal in yeast will be used to illustrate these ideas