

COLLOQUIUM  
UNIVERSITY OF PITTSBURGH  
FEBRUARY 16, 2007  
704 THACKERAY HALL  
4:00 P.M.

SPEAKER: **PROFESSOR G. BARD ERMENTROUT**

UNIVERSITY OF PITTSBURGH

TITLE: **WHEN THE SIGNAL IS THE NOISE: STOCHASTIC  
SYNCHRONIZATION**

ABSTRACT: Stochastic synchronization is a mechanism through which correlated noise is able to drive independent oscillators toward synchronization. It has been suggested as a mechanism for cooperative behavior in cellular and neural processes. In this talk I will describe some recent work on how this happens and some optimality principles that underlie stochastic synchrony. The talk will be accessible to graduate students as the main tools are calculus and simple perturbation theory.