Center for Complex Systems and Brain Sciences

RESEARCH TALK

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DATE: **Friday, January 12, 2018**
TIME: **03:00 PM**
PLACE: **Behavioral Sciences Bldg., BS-12, Room 303**

TITLE: "Parkinson's Disease and the dopamine dependent (dys)regulation of cortical-basal ganglia synchronization"

ABSTRACT: An emerging view of a number of neurological diseases has led to the reclassification of pathologies such as Parkinson's disease (PD) and epilepsy as 'circuit disorders' by which alterations to brain connectivity precipitates abnormal electrophysiological dynamics. In this project we investigate recordings from the cortex and basal ganglia in attempt to better understand the origins of hyper-synchronous dynamics in the motor system following dopamine depletion associated with PD. We ask how network structure impacts the transition to synchrony in this system by fitting biophysical models to empirical data from patients who have undergone surgery for deep brain stimulation.

ALL ARE WELCOME