

Workshop: Emerging Applications in Systems and Control Theory for Neuroscience and Neural Medicine

Location: **Room 5**, Renaissance Washington, DC Downtown Hotel

Schedule:

8:30-9:10 AM	Modeling and Control of Burst Suppression for Management of Medical Coma	B. Westover
9:10-9:50 AM	Toward Closed-Loop Control of Anesthesia	G. Dumont
9:50-10:10 AM	Coffee break	
10:10-10:50 AM	Toward Closed-Loop Deep Brain Stimulation: A Tractable, Scalable, Data-Driven Modeling Framework of Neuronal Networks	S. Sarma
10:50-11:30 AM	Current and Future Clinical Approaches to Neural Control of Epileptic Activity	S. Cash
11:30 AM-12:10 PM	Distributed Control and Estimation in Mean-field Cortical Network Models	S. Ching
12:10-1:20 PM	Lunch	
1:20-2:00 PM	Observability and Controllability in Small Neuronal Networks: The Interplay of Symmetry and Synchrony	S. Schiff
2:00-2:40 PM	Using Optimal Control to Achieve Desynchronization of Neural Populations	J. Moehlis
2:40-3:10 PM	Coffee break	
3:10-3:50 PM	Optimal Control of Spiking Neuron Ensembles	Jr-Shin Li
3:50-4:30 PM	Control Strategies for Underactuated Neural Ensembles Driven by Optogenetic Stimulation	J. Ritt