

Conference on Neural Dynamics and Computation

held in honor of John Rinzel

June 13-14
Courant Institute for Mathematical Sciences

Conference Schedule

Saturday, June 13

9:15-9:30	Opening remarks
9:30-10:00	<i>Charles Peskin</i> Spontaneous Transitions between Synchrony and Asynchrony in a Network of Discrete-State Neurons with Stochastic Synaptic Transmission.
10:00-10:30	<i>Victoria Booth</i> Simulating microinjection of neurotransmitter agonists and antagonists in a novel model of the sleep-wake regulatory network.
10:30-11:00	<i>Coffee Break</i>
11:00-11:30	<i>Shihab Shamma</i> Auditory perception through the cortical analysis of spectrotemporal modulations
11:30-12:00	<i>Dan Sanes</i> Exploiting development to evaluate sensory coding mechanisms
12:00-12:30	<i>Catherine Carr</i> On Hearing with More Than One Ear: Lessons from Evolution

12:30-2:30	<i>Lunch Break</i>
2:30-3:00	<i>Michael O'Donovan</i> TBA
3:00-3:30	<i>David Terman</i> A mathematical model of the sleep/wake cycle
3:30-4:00	<i>Joseph Keller</i> Sound source location by barn owls
4:00-6:10	<i>Poster session and reception</i>
6:30-8:30	<i>Banquet Dinner at the NYU Torch Club</i>

Sunday, June 14

9:00-9:30	Coffee and light continental breakfast
9:30-10:00	<i>Bard Ermentrout</i> Some reflections on waves
10:00-10:30	<i>Arthur Sherman</i> What Do We Talk About When We Talk About Cooperativity of Synaptic Release?
10:30-11:00	<i>Coffee Break</i>
11:00-11:30	<i>Wilfrid Rall</i> TBA
11:30-12:00	<i>Sharon Crook</i> Motoneuron model of self-sustained firing after spinal cord injury
12:00-12:30	<i>Leo van Hemmen</i> Theory of internally coupled ears – the ICE model: How lizards and birds provide us with a novel category of hearing

12:30-2:30

Lunch Break

2:30-3:00

Jack Cowan

Statistical Mechanics of Large-Scale Brain Activity

3:00-3:30

Xiao-Jing Wang

Reconciling coherent oscillation with rate modulation of irregular spiking activity in selective attention: gamma-range synchronization between sensory and executive cortical circuits

3:30-4:00

David McLaughlin

Representing Neuronal Dynamics through Coarse-Grained Event-Trees