Computational Approaches to Cognition

A symposium organized by the Society for Mathematical Psychology

Hosts: Amy Criss, Joachim Vandekerckhove, Eric-Jan Wagenmakers

Thursday, November 17, 2016

The Society for Mathematical Psychology promotes the advancement and communication of research in mathematical psychology and related disciplines. Mathematical psychology is broadly defined to include work of a theoretical character that uses mathematical methods, formal logic, or computer simulation.

Symposium schedule

8:55	*Opening remarks*	

Session I: Bidirectional constraints between neurobiology and computational models of cognition

9:00	Bingni Brunton	*Understanding neural computation in long-term, naturalistic human brain recordings*
	Randy Gallistel	*The intracellular hypothesis*
	Sam Gershman	*Rethinking biological plausibility*
	Marc Howard	*Neural representations as a bridge between behavior and neurobiology*
10:20	*Break until 10:35*	

Session II: Joint modeling

10:35	Gordon Logan, Thomas Palmeri, & Jeffrey Schall	*Neurons, models, and minds*
10:55	Brandon Turner	*The neural basis of self-control in intertemporal choice*
11:15	Beth Baribault	*Using cognitive latent variable models to evaluate theories of attention*
11:35	*Lunch until 13:00*	
13:00	*Poster session until 14:15*	

Session III: New methods

14:15	John Dunn & Michael Kalish	*Testing psychological theories with state-trace analysis*
14:35	Richard Shiffrin	*A Bayesian assessment of reproduction*
14:55	Zita Oravecz & Joachim Vandekerckhove	*Individual differences in within-person dynamics in ecological momentary assessment*
15:15	Christopher Donkin & Joachim Vandekerckhove	*Large N and radical randomization to test the robustness of empirical results*