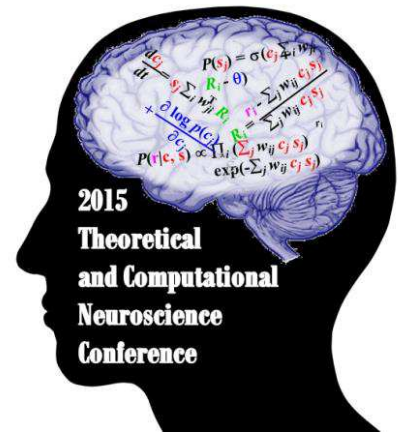# 12th Annual Theoretical and Computational Neuroscience Conference

February 6-7, 2015
BioScience Research Collaborative (BRC)

Organizers:
Harel Shouval, University of Texas Health Science Center at Houston
Krešimir Josić, University of Houston
Fabrizio Gabbiani, Baylor College of Medicine
Steve Cox, Rice University
Zachary Kilpatrick, University of Houston
Xaq Pitkow, Rice University and Baylor College of Medicine
Melissa Thompson, Gulf Coast Consortia

Conference Agenda

Friday, February 6, 2015

Unless otherwise noted, proceedings will take place in the Auditorium

4:00 pm	**Reverse-engineering Common Sense: Modeling Human Intelligence with Probabilistic Programs and Program Induction** Josh Tenenbaum, Massachusetts Institute of Technology
5:00 pm	Reception and Networking

Saturday, February 7, 2015

9:00 am	**Welcome and Introduction**
9:10 am	**The Private Lives of Neurons** Nicholas Priebe, University of Texas at Austin
10:00 am	**Inferring Rules of Interactions between Neurons from Population Recordings** Dimitri Yatsenko, Baylor College of Medicine
10:20 am	Break
10:40 am	**A New Test for Optimal Nonlinear Decoding** Xaq Pitkow, Baylor College of Medicine and Rice University
11:20 am	Group Discussions
11:50 am	Lunch and Posters (BRC 1st Floor Event Space)
1:10 pm	**Learning to Predict** Larry Abbott, Columbia University
2:00 pm	**Stable Reinforcement Learning via Temporal Competition of LTP and LTD Traces** Marco Huertas, University of Texas Health Science Center at Houston
2:20 pm	Break
2:50 pm	**Nanotechnology for Neural Interfaces** Jacob Robinson, Rice University
3:30 pm	Group Discussion and Closing Remarks

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