**SEVENTEENTH INTERNATIONAL CONFERENCE**

**ON COGNITIVE AND NEURAL SYSTEMS (ICCNS)**

**June 4 – 7, 2013**

Boston University

677 Beacon Street

Boston, Massachusetts 02215 USA

<http://cns.bu.edu/cns-meeting/conference.html>

Sponsored by the Boston University

Center for Adaptive Systems,

Center for Computational Neuroscience and Neural Technology (CompNet),

and

Center of Excellence for Learning in Education, Science, and Technology (CELEST)

with financial support from the National Science Foundation



This interdisciplinary conference is attended each year by approximately 300 people from 30 countries around the world. As in previous years, the conference will focus on solutions to the questions:

HOW DOES THE BRAIN CONTROL BEHAVIOR?

HOW CAN TECHNOLOGY EMULATE BIOLOGICAL INTELLIGENCE?

The conference is aimed at researchers and students of computational neuroscience, cognitive science, neural networks, neuromorphic engineering, and artificial intelligence. It includes invited lectures and contributed lectures and posters by experts on the biology and technology of how the brain and other intelligent systems adapt to a changing world. The conference is particularly interested in exploring how the brain and biologically-inspired algorithms and systems in engineering and technology can learn. Single-track oral and poster sessions enable all presented work to be highly visible. Three-hour poster sessions with no conflicting events will be held on two of the conference days. Posters will be up all day, and can also be viewed during breaks in the talk schedule.

This year's conference will include, in addition to regular invited and contributed talks and posters, two workshops on the topics:

NEURAL DYNAMICS OF VALUE-BASED DECISION-MAKING AND COGNITIVE PLANNING

and

SOCIAL COGNITION: FROM BABIES TO ROBOTS

See the url above for the complete conference program and for details about local logding and parking options.

**CONFIRMED INVITED SPEAKERS**

**Todd Braver** *(Washington University, St. Louis)*

Flexible neural mechanisms of cognitive control: Influences on reward-based decision-making

**Marisa Carrasco** *(New York University)*

Effects of attention on early vision

**Patrick Cavanagh** *(Université Paris Descartes)*

Common functional architecture for spatial attention and perceived location

**Robert Desimone**[Plenary Speaker]*(Massachusetts Institute of Technology)*

Prefrontal-visual cortex interactions in attention

**Asif Ghazanfar** *(Princeton University)*

Evolving and developing communication through coupled oscillations

**Stephen Grossberg** *(Boston University)*

Behavioral economics and neuroeconomics: Cooperation, competition, preference, and decision-making

**Joy Hirsch** *(Columbia University Medical Center)*

Neural circuits for conflict resolution

**Roberta Klatzky** *(Carnegie Mellon University)*

Multi-modal interactions within and between senses

**Kevin LaBar** *(Duke University)*

Neural systems for fear generalization

**Randi Martin** *(Rice University)*

Memory retrieval and interference during language comprehension

**Andrew Meltzoff** (*University of Washington*)

How to build a baby with social cognition: Accelerating learning by generalizing across self and other

**Javier Movellan** *(University of California, San Diego)*

Optimal control approaches to the analysis and synthesis of social behavior

**Mary Potter** (*Massachusetts Institute of Technology*)

Recognizing briefly presented pictures: Feedforward processing?

**Pieter Roelfsema** (*The Netherlands Institute for Neuroscience*)

Neuronal mechanisms for perceptual organization

**Daniel Salzman** *(Columbia University)*

Cognitive signals in the amygdala

**Daniel Schacter** [Plenary Speaker] (*Harvard University*)

Constructive memory and imagining the future

**Wolfram Schultz** *(University of Cambridge)*

Neuronal reward and risk signals

**Helen Tager-Flusberg** (*Boston University*)

Identifying early neurobiological risk markers for autism spectrum disorder in the first year of life

**Jan Theeuwes** *(Vrije Universiteit Amsterdam)*

Prior history shapes selection

**James Todd** *(Ohio State University)*

The perception of 3D shape from texture

**Leslie Ungerleider** (*National Institutes of Health*)

Functional architecture for face processing in the primate brain

**Jeremy Wolfe** *(Harvard Medical School and Brigham & Women's Hospital*)

How selective and non-selective pathways contribute to visual search in scenes

**REGISTRATION FORM**

Seventeenth International Conference on Cognitive and Neural Systems

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677 Beacon Street

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Fax: +1 617 353 7755

Mr/Ms/Dr/Prof:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Affiliation:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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City, State, Postal Code:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone and Fax:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The registration fee includes a conference reception and multiple daily coffee breaks.

**CHECK ONE:**

( ) $135 Conference (Regular)

( ) $85 Conference (Student)

**METHOD OF PAYMENT:**

[ ] Enclosed is a check made payable to "Boston University"

Checks must be made payable in US dollars and issued by a US correspondent bank. Each registrant is responsible for any and all bank charges.

[ ] I wish to pay by credit card

 (MasterCard, Visa, or Discover Card only)

Name as it appears on the card:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Type of card: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Expiration date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Account number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_