

FORTIETH ANNUAL INTERDISCIPLINARY CONFERENCE

Teton Village, Jackson Hole, Wyoming

February 1 – February 6, 2015

Organizer: George Sperling, University of California, Irvine

Program

Sunday, February 1: 5:00 - 5:30 pm*****Reception******Registration, Snacks, and Refreshments.*

Sunday, February 2: 5:30 - 8:00 pm Sunday Night Miscellany

Rich Shiffrin, *Indiana U.* A mysterious finding about question-order in surveys and a quantum account.
Shaw Ketels, *U. Colorado.* Testing two pedagogical prescriptions in the use of classroom response systems
Wolfgang Pauli, *CalTech.* fMRI dissociable dopamine systems for appetitive and aversive stimuli.
Tom Busey, *Indiana U.* Tracking the growth of evidence in visual comparison tasks
Bas Rokers, *U. Wisconsin.* Visual motion perception in the human brain.
Jenny Read, *Newcastle U., UK.* Developing a stereoscopic 3D display system for an insect.

Monday, February 2: 4:00 - 8:00 pm Psychophysics and Physiology

David Heeger, *NYU.* Reliability of sensory-evoked activity in autism.
Nicholas Port, *Indiana U.* Eye movement dynamics: A rapid objective involuntary measure of concussion/MTBI.
Tania Pasternak, *U Rochester.* Prefrontal lesions affect memory-guided comparisons of contralateral motion
Ken Britten, *UC Davis.* MST responses during naturalistic steering behavior.
John Reynolds, *Salk Institute.* Using optogenetics to probe neural circuit mechanisms underlying attention.
Michael Landy, *New York U.* A model of contingent adaptation in cortex.
Bill Geisler, *U. Texas, Austin.* Dimensions of masking measured by constrained natural scene sampling.

Tuesday, February 3: 4:00 - 8:00 pm Perceptual Organization, Attention

Roger Ratcliff & Gail McKoon, *Ohio State U.* Modeling the go/no-go task.
Zhong-Lin Lu, *Ohio State U.* Visual perceptual learning: How experience shapes visual perception.
Barbara Doshier, *UC Irvine.* Perceptual learning: plasticity, stability and the integrated reweighting theory.
Aaron Seitz, *UC Riverside.* Better batting through perceptual learning.
Randy Blake, *Vanderbilt.* Visual competition.
George Sperling, *UC Irvine.* Visual attention filters for color.

Wednesday, February 4: 4:00 - 8:00 pm Higher-order Perception

Zygmunt Pizlo, *Purdue U.* Spatially-global interpolation of closed curves.
James Elder, *York U.* Generative shape trees.
Richard Murray, *York U.* Lightness constancy via Bayesian anchoring.
Casper Erkelens, *Utrecht U., Netherlands.* The extent of visual space inferred from perspective angles
Tim McNamara, *Vanderbilt U.* Cue combination in human spatial navigation.
Keith Schneider, *York U. Canada.* Quantized time perception and illusions of motion.
** Business Meeting**

Thursday, February 5: 4:00 – 8:00 pm Visual, Photonic, and fMRI Assessment

Jeff Mulligan, *NASA Ames Research Center.* Assessment of sensory and cognitive performance using mobile touch-screens
Laurie Wilcox, *York U.* On the benefits of disparity-based grouping: Improved detection in visual search.
Justin Halberda, *Johns Hopkins U.* Clustering and number perception in random dot arrays.
Larry Cormack, *U. Texas, Austin.* (Almost) continuous psychophysics: Using real-time target tracking to measure sensitivity.
Bosco Tjan, *USC.* A forward model of BOLD fMRI for multi-voxel decoding in human V1.
Cory Miller, *UC San Diego.* Optogenetic photostimulation in marmoset cortex

Friday, February 6: 4:00 – 8:00 pm Friday Miscellany

Dirk Bernhardt-Walther, *U. Toronto.* Which features do people use to categorize natural scenes?
Kerry Jordan, *Utah State U.* The nature of impulsivity.
Jane Barker, *U. Colorado.* Children's time use predicts developing self-directed executive function.
Xiaoping Hu, *Emory U.* Modeling brain state switching with a hidden Markov model.
Steve Silverstein, *Rutgers U.* Reduced susceptibility to depth inversion illusions in schizophrenia but not bipolar disorder.
Peng Sun, *NYU.* Visual attention filters act at very early perceptual stages.
Charlie Chubb, *UCI.* Most people cannot hear the difference between major vs minor musical modes.
Misha Pavel & Holly Jimison, *Northeastern U.* Mathematical models of behavior change.

* * * 8:30pm Banquet * * *