

# THIRTY-SECOND ANNUAL INTERDISCIPLINARY CONFERENCE

## Teton Village, Jackson Hole, Wyoming

February 4 – February 9, 2007

Organizer: George Sperling, University of California, Irvine

Proceedings

Sunday, February 4: 5:15 - 5:55 pm\*\*\***Reception**\*\*\**Registration, Snacks, and Refreshments.* The Inn, Room 230

Sunday, February 4: 6:00 - 8:00 pm\*\*\***First Night Miscellany** The Inn, Rimrock Room

Richard Shiffrin, *Indiana U.* Infomercial on Cross-Country Skiing.  
Holly Jimison, *Oregon Health & Science U.* Embedded Assessment of Verbal Fluency in a Computer Games Environment.  
Misha Pavel, *Oregon Health & Science U.* Model-Based Assessment of Cognitive Functions from Computer Games.  
Steve Shevell, *U. Chicago.* And The Beat Goes On: Bono's Theory of Induced Temporal Modulation.

Monday, February 5: 3:45 – 4:15 pm The Inn, Room 230, **Reception**

Monday, February 5: 4:20 – 8:00 pm **Neural Mechanisms of Visual Cognition** (Organizer: Tatiana Pasternak)

John Reynolds, *Salk Institute.* Neural Mechanisms of Visual Attention in Macaque Area V4.  
Keith Schneider, *U. Rochester.* fMRI Attention Modulation in LGN and Superior Colliculus.  
George Sperling, *UC Irvine.* A Functional Architecture for Visual Attention: Application to Visual Spatial Attention.  
Zhong-Lin Lu, *USC.* Covert Attention Enhances Stimuli and Excludes External Noise in Early Visual Areas.  
Tatiana Pasternak, *U. Rochester.* Response Demands Modulate Prefrontal Cortex Neurons.  
Anthony Norcia, *Smith-Kettlewell.* Periodic Visual Stimuli Lead to Anticipatory EEG Responses in Prefrontal & Occipital Cortex.

Tuesday, February 6: 4:00 – 8:00 pm **Visual Receptive Fields; Decision Making** (Organizers: Tatiana Pasternak & George Sperling)

James Elder, *York U.* A Geometric Model of V1 Neural Selectivity.  
Paul Sajda, *Columbia U.* Circuitry & Classification of V1 Simple & Complex Cells.  
Mike Shadlen, *U. Washington/Hughes Inst.* A Neural Mechanism for Decision-Making.  
Alex Pouget, *U. Rochester.* Bayesian Decisions With Probabilistic Population Codes.  
Peter Latham, *University College London.* Optimal Decision Making: Random Dots Revisited.  
Bruce Cumming, *Lab. of Sensorimotor Research, NEI.* Subspace Mapping to Investigate the Origin of Choice Probability.

Wednesday, February 7: 4:00 – 8:00 pm **Perception 1**

David Heeger, *NYU.* Visual and Motor Adaptation in the Human Mirror System.  
Ken Britten, *UC Davis.* Neural Mechanisms of Optic Flow Processing and the Perception of Self-Motion.  
Ted Wright, *UC Irvine.* Equisalience Function Analysis.  
Peter Dixon, *U. Alberta.* Memory-Based Action.  
Shihab Shamma, *U. Maryland.* Representation of Speech in Primary Auditory Cortex.  
Randolph Blake, *Vanderbilt U.* Psychoacoustics of a Chilling Sound.

Thursday, February 8: 4:00 – 8:00 pm **Perception 2**

Dave Peterzell, *UC San Diego.* Cracking Sensory Codes Using Individual Differences.  
Tom Busey, *Indiana U.* On the Nature of Privileged Visual Stimuli: An Interaction Between Noise and Inversion.  
David Whitaker, *U. Bradford.* Multisensory Adaptation to Temporal Asynchrony.

\*\*Brief Business Meeting\*\*

Jeff Mulligan, *NASA Ames.* Oculomotor Mechanisms Revealed by the Delayed Feedback Paradigm.  
John Antrobus, *CUNY.* Fast, Accurate Recognition: Utility and Context: Repetition Priming with Visual Words.  
Barbara Doshier, *UCI.* Object Attention: Mechanisms and Dependencies.

Friday, February 9: 4:00 – 8:00 pm **Cognition**

Lingyun Zhang, *UC San Diego.* Probabilistic Search 1.0: A New Theory of Visual Search.  
Randy Gallistel, *Rutgers U.* Using Information Theory to Better Understand Associative Learning.  
Ragnar Steingrimsen, *UC Irvine.* Time-Order Error in the Context of a Theory of Global Psychophysics.  
Ken Malmberg, *U. South Florida.* Towards an Understanding of Individual Differences in Episodic Memory.  
Richard Shiffrin, *Indiana U.* How Predictive Information Affects Object Identification.

\*\*\* 8:20pm Banquet \*\*\*

### Attendees

Stefanie Drew, *UC Irvine*  
Pam Jeter, *UC Irvine*  
Michael Jones, *Indiana U.*  
Fabio Leite, *Ohio State U.*

Ling Lin, *UC Irvine*  
Danting Liu, *UC Irvine*  
Jessica Love, *Ohio State U.*  
Gail McKoon, *Ohio State U.*

Bennet Murdock, *U. Toronto*  
Roger Ratcliff, *Ohio State U.*  
Jeffrey Starns, *Ohio State U.*  
Corey White, *Ohio State U.*