

THIRTY-NINTH ANNUAL INTERDISCIPLINARY CONFERENCE

Teton Village, Jackson Hole, Wyoming

February 2 – February 7, 2014

Organizer: George Sperling, University of California, Irvine

Proceedings

Sunday, February 2: 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.* Infomercial on back-country skiing.

Shaw Ketels, *U. Colorado.* Snowboarding as an empirical domain.

Tom Busey, *Indiana U.*, & Owen Busey. An instrumentation package for performance monitoring of snowboarding.

Matthias Scheutz, *Tufts U.* An embodied real-time model of language-guided visual search.

Sverker Sikstrom, *Lund U.* Accounting for retrieval-induced forgetting with spike-time-dependent plasticity.

Xiaoping Hu, *Emory U.* Probing more into the dynamic nature of resting state brain.

Monday, February 3: 4:00 - 8:00 pm Psychophysics and Physiology

Zhong-Lin Lu, *Ohio State U.* The quick methods: Bayesian adaptive estimation of psychological functions.

Barbara Doshier, *UC Irvine.* Perceptual learning, feedback, and generalization.

Richard Murray, *York U.* A classification-image-like method reveals strategies in 2AFC tasks.

Justin Halberda, *Johns Hopkins U.* Approximate number and average size are representations with no individuals.

Steve Shevell, *U. Chicago.* What perceptual filling-in reveals about working memory.

Nicholas Port, *Indiana U.* Visual motion perception & ocular-following eye movements in people of all ages.

Tuesday, February 4: 4:00 - 8:00 pm Perceptual Organization (Organizer: James Elder)

James Elder, *York U.* A generative theory of shape.

Ed Connor, *Johns Hopkins U.* A sparse object coding scheme in area V4.

Steve Silverstein, *Rutgers U.* Perceptual organization impairment in schizophrenia: Mechanisms and consequences.

Rudiger von der Heydt, *Johns Hopkins U.* Spike synchrony reveals grouping circuits for proto-object coding in visual cortex.

Steven Zucker, *Yale U.* The differential geometry of shape from shading. Biology reveals curvature structure: Organizing isophotes.

Cory Miller, *UC San Diego.* Vocal motor activity in primate frontal cortex during natural communication.

Wednesday, February 5: 4:00 - 8:00 pm Binocular Vision (Organizer: Larry Cormack)

Larry Cormack, *U. Texas, Austin.* Assaying visuomotor behavior using the response movement correlogram.

Marty Banks, *UC Berkeley.* Is stereo vision optimized for natural environments?

Johannes Burge, *U. Texas, Austin.* Using natural images to determine optimal processing for speed estimation.

Thaddeus Czuba, *Albert Einstein College of Medicine.* More than meets the eye: Binocular 3D motion processing in area MT.

Laurie Wilcox, *York U.* On the effects of perceptual grouping on depth percepts from stereopsis.

George Sperling, *UC Irvine.* The moving-barber-pole illusion.

** Business Meeting

Thursday, February 6: 4:00 – 8:00 pm Development, Working Memory (Organizer: Steve Shevell)

David Burr, *U. Florence.* Cross-sensory integration and calibration during development.

Concetta Morrone, *U. Pisa.* Adaptability and plasticity in adult human primary cortex.

Bosco Tjan, *USC.* Quantifying the relationship between the fMRI BOLD signal and neuronal activity.

Zygmunt Pizlo, *Purdue U.* Solving large problems with small working memory.

Michael Landy, *New York U.* Coordinate systems for movement planning.

Jeff Mulligan, *NASA Ames Research Center.* Smooth pursuit of flicker-defined motion.

Friday, February 7: 4:00 – 8:00 pm Friday Miscellany

Patricia Cheng, *UCLA.* Nature's wisdom: How causal discovery in preschool children can inform scientific causal inference.

Roger Ratcliff & Gail McKoon, *Ohio State U.* Single trial analysis of EEG in memory.

Rich Shiffrin, *Indiana U.* On dynamic models for memory retrieval.

Misha Pavel, *Northeastern U.* Can big data compensate for small ideas?

Peter Dixon, *U. Alberta.* Speed, accuracy, and mind-wandering.

Ben Backus, *SUNY.* A model for the treatment of two disorders of binocular vision.

Poster: Feb 6-7, Baptiste Caziot, *SUNY.* The orienting of attention across binocular disparity.

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Attendees

Michael Crognale, *U. Nevada, Reno*

Izidor Gertner, *CUNY*

Holly Jimison, *Northeastern U.*

Bennet Murdock, *U. Toronto*

Mark Stewart, *Willamette U.*

George Wolberg, *CUNY*