

FORTY-FIRST ANNUAL INTERDISCIPLINARY CONFERENCE
The Village at Breckenridge, Colorado

All events in the Blue River Room

January 31 – February 5, 2016

Organizer: George Sperling, University of California, Irvine

PROGRAM

Sunday, January 31: 5:00 - 5:30 pm*****Reception******Registration, Snacks, and Refreshments.*

Sunday, January 31, 5:30 - 8:00 pm

Wyeth Bair, *U. Washington*. A binocular model for motion integration in MT neurons.

Vincent Billock, *Ohio State U.* Visual amplification via sensory integration in rattlesnakes, cats and humans.

Sven Dickinson, *U. Toronto*. Model-based perceptual grouping and shape abstraction.

Anitha Pasupathy, *U. Washington*. Visual shape representation in the intermediate stages of the primate brain.

Michael Rudd, *U. Washington*. Cortical computational model explains lightness contrast and assimilation.

Monday, February 1, 4:00 - 8:00 pm

Lawrence Cormack, *U. Texas*. The perception of depth vs. frontoparallel motion probed with motor tracking.

Frank Durgin, *Swarthmore College*. The possible role of angular expansion in the misperception of large-scale space.

James Elder, *York University*. The Southampton-York Natural Scenes (SYNS) dataset.

Steven Shevell, *U. Chicago*. Color-motion feature binding errors without color: an AIC story.
--15 min break ---

Bosco Tjan, *USC*. A computational account for the development of a preferred retinal locus.

Jessica Witt, *Colorado State U.* Action influences perception but only when action is reliable.

Deyue Yu, *Ohio State U.* Letter recognition: crowding and perceptual learning.

Tuesday, February 2, 4:00 - 8:00 pm

Bill Geisler, *U. Texas, Austin*. Measurements and models of detection in natural scenes.

Joe Houpt, *Wright State U.* Revisiting stereoscopic disparity as a feature in visual search.

Phil Kellman, *UCLA*. Spatiotemporal boundary formation.

Michael Landy, *New York U.* Criterion learning in static and dynamic environments.

--15 min break ---

Zhong-Lin Lu, *The Ohio State U.* Exploring individual differences in sensory memory.

Jenny Read, *Newcastle U.* Mantis stereopsis in complex scenes.

Christopher Rozell, *Georgia Tech*. Learning manifold transport operators of 3D transformations from 2D imagery.

Wednesday, February 3, 4:00 - 8:00 pm

Ali Winkler, *U. Nevada, Reno*. Psychophysical Asymmetries and Higher-Order Representations of Color Explored Using Unipolar VEPs

Jeff Mulligan, *NASA*. Measuring and modeling shared visual attention.

Misha Pavel, *Northeastern U.* Training “fluid intelligence” with a computer game and transcranial stimulation.

Pizlo, Zygmunt, *Purdue U.* The role of 3D symmetry in figure-ground organization of real scenes.

--15 min break ---

Nicholas Port, *Indiana U.* Ocular-motor performance of IU athletes 2.0: a nefarious slope.

Constantin Rothkopf, *Technical U. Darmstadt.* What is the cost of a glance?

George Sperling, *UC Irvine.* Infomercial for attention filters.

Brief business meeting

Thursday, February 4, 4:00 - 8:00 pm

Thomas Serre, *Brown U.* Towards a unified model of classical and extra-classical receptive fields.

Barbara Doshier, *UC Irvine.* Perceptual learning.

Xiaoping Hu, *Emory University.* Imaging neuromelanin and iron in Parkinson's disease with MRI.

Laurence Maloney, *New York U.* Representing and distorting probability and probability density.

--15 min break ---

Bas Rokers, *U. Wisconsin.* The structural consequences of abnormal binocular input in children and adulthood.

Michele Rucci, *Boston U.* Beyond the sensory-motor loop: the inseparable link between vision and action.

Keith Schneider, *York U.* Revisiting the discrete perception hypothesis.

Friday, February 5, 4:00 - 8:00 pm

Dirk Bernhardt-Walther, *U. Toronto.* Contour junctions underlie neural representations of scene categories in human vision.

Bruce Brown, *Brigham Young U.* Whole-wave EEG analysis in the identification of neuropsychiatric illnesses.

Gregory Francis, *Purdue U.* A small part of the Human Brain Project: Neural dynamics of visual segmentation.

Alan Johnston, *U. Nottingham.* The harmonic vector average: a new approach to the aperture problem.

--15 min break ---

Alan Stocker, *U. Penn.* Perception: when efficient coding meets Bayesian decoding.

Laurie Wilcox, *York U.* Depth magnitude judgments for physical targets.

Patricia Cheng, *UCLA.* Resolving explanations of moral dilemmas: How should autonomous vehicles behave in a dilemma?

8:30p Banquet at Quandary Grille

ATTENDEES

Tom Busey, *Indiana U.*

Holly Jimison, *Northeastern U.*

Eric Mais, *U. Hawaii*

Jack Silcox

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