

42nd AIC, Breckenridge, Colorado
The Village at Breckenridge
Blue River Room
January 29 – February 3

Sunday, 5-8pm – James Elder (Organizer and Chair)

- 5:30 Curtis Baker, *McGill U.* Neural mechanism for multiplexed detection of texture and luminance boundaries in the visual cortex.
- 5:55 Tai Sing Lee, *Carnegie-Mellon U.* Neural circuits for surface and boundary integration.
- 6:20 Anitha Pasupathy, *U. Washington.* Encoding of object boundaries in primate area V4.
- 6:45 Break.**
- 7:10 Thomas Serre, *Brown U.* A systematic comparison between visual cues for boundary detection.
- 7:35 James Elder, *York U.* Discriminating depth edges.

Monday, 4-8pm – Larry Cormack (Organizer and Chair)

- 4:30 Johannes Burge, *U. Penn.* Depth variation, binocular contrast differences, and disparity estimation in natural scenes.
- 4:55 Frank Durgin, *Swarthmore College.* Orientation and direction perception in reoriented observers.
- 5:20 Wilson S. Geisler, *U. Texas, Austin.* Submasking: a key factor in human pattern vision.
- 5:45 Alan Stocker, *U. Penn.* On the lawful relation between discrimination threshold and perceptual bias.
- 6:10 Break.**
- 6:45 Wyeth Bair, *U. Washington.* Comparing a deep convolutional network to the brain: shape tuning and translation invariance.
- 7:10 George Sperling, *UC Irvine.* The perceived motion direction of equal-spatial-frequency plaid stimuli.
- 7:35 Larry Cormack, *U. Texas, Austin.* An infomercial for tracking tasks (in the spirit of George's infomercial on attentional filters).

Tuesday, 4-8pm – Sereno Symposium: The landscape of human cognition – a single family's Perspective – Zyg Pizlo (Organizer and Chair)

- 4:30 Sara Sereno, *U. Glasgow.* Measures of visual words.
- 5:00 Anne Sereno, *U. Texas, Houston.* Cognition: from single cells to the clinic.
- 5:30 Margaret Sereno, *U. Oregon.* Neural encoding of scene complexity.
- 6:00 Break.**
- 6:30 Joan Sereno, *U. Kansas.* Vibrations to representations: issues in speech processing.
- 7:00 Paul Sereno, *U. Chicago.* Parallel paths to bipedalism, tool-making, dense brains, and complex phonic signaling and learning.
- 7:30 Martin Sereno, *San Diego State U.* DNA and language: the origin of symbol-using systems.

Banquet – Forest Room – 8:30pm – 11:00pm

Wednesday, 4-8pm – Jeffrey Mulligan (Chair)

- 4:30 Holly B. Jimison, *Northeastern U.* Monitoring stress in a dynamic real-world environment.
- 5:00 Vincent A. Billock, *Ohio State U.* Not just for binding anymore: using coupled neural oscillators for maximum selection, winner-take-all sensory calculations, and cortical hue opponency modeling.
- 5:30 Keith Schneider, *U. Delaware.* Imaging the human thalamic reticular nucleus.
- 6:00 Break.**
- 6:30 John Tsotsos, *York U.* How to control attention and what attention controls.
- 7:00 Joachim Vandekerckhove, *UC Irvine.* Mitigation of publication bias with behavioral process models.
- 7:30 Irmina Gradus-Pizlo, *IU School of Medicine.* Development of screening echocardiogram for detection of asymptomatic left ventricular dysfunction based on the shortest path in a log-polar representation of images.

Thursday, 4-8pm – George Sperling (Chair)

- 4:30 T. Rowan Candy, *Indiana U.* Binocular function and eye alignment during infancy and early childhood.
- 4:55 Philip Kellman, *UCLA.* Path integration and illusory contours: evidence for an intermediate representation in visual contour interpolation.
- 5:20 Misha Pavel, *Northeastern U.* Combination of game and model-based approaches to training fluid intelligence.
- 5:45 Business meeting.
- 6:10 Break.**
- 6:45 Jeff Mulligan, *NASA.* Color algebras.
- 7:10 Steven Shevell, *U. Chicago.* Perceptual Resolution of Color from Ambiguous Neural Representations.
- 7:35 Jihyun Yeonan-Kim, *U. Pompeu Fabra.* Interdisciplinarity of center-surround processing: neural mechanism, perception, and engineering.

Friday, 4-8pm – Symposium in memory of Bosco Tjan – Zhong-Lin Lu (Organizer and Chair)

- 4:30 Zhong-Lin Lu, *Ohio State U.* Bosco Tjan: An ideal scientific role model.
- 5:00 Xiaoping Hu, *UC Riverside.* Alterations of resting-state brain states in Parkinson's disease.
- 5:30 Haluk Ogmen, *U. Denver.* A new conceptualization of human visual sensory memory.
- 6:00 Break.**
- 6:30 Michael E. Rudd, *U. Washington.* Computational cortical model of top-down influences on lightness judgments.
- 7:00 Aaron Seitz, *UC Riverside.* Training effective use of peripheral vision in Macular Degeneration.
- 7:30 Ben Backus, *SUNY.* Use of response time to demonstrate fast use of disparity for depth perception.