

# MODVIS 2019 Program

## Wednesday: Objects and contours.

9:00 - *The Challenge for Vision of Fluctuating Real-World Illumination.* David H. Foster, University of Manchester

9:30 - *Variance Partitioning Reveals Consistent Representation of Object Boundary Contours in LO Across Different Datasets.* Mark D. Lescroart, University of Nevada at Reno

10:00 - Break

10:30 - *An Observer Model Version of General Recognition Theory.* Fabian Soto, Florida International University

11:00 - *Quantified Measurement of the Tilt Effect in a Family of Café Wall Illusions.* Nasim Nematzadeh, University of South Australia

11:30 - *Mental geometry for estimating relative 3D size.* Akihito Maruya, SUNY College of Optometry

12:00 - Lunch

2:00 - *Modeling Visual Enumeration Using Cumulative Link Regression.* Anthony D. Cate, Virginia Tech.

2:30 - *Recovering Depth from Stereo without Using Any Oculomotor Information.* Tadamasa Sawada, Higher School of Economics (Moscow)

3:00 - Break

3:30 - *Virtual Eye: a Spatial-Temporal Bottom-Up Eye Sensitivity Model.* Todd Goodall, Facebook Reality Labs

4:00 - *Contour Integration in Real Images.* Peng Sun, UC Irvine

4:30 - Business meeting

## Thursday – Neuroscience.

9:00 - *Explaining The Lightness Of Real Illuminated Surfaces Viewed Under Gelb illumination With A Neurocomputational Model.* Michael E. Rudd, University of Washington

9:30 - *Differentiating Changes in Population Encoding Models with Psychophysics and Neuroimaging.* Jason Hays, Florida International University

10:00 - Break

10:30 - *Modeling Human Perception of High Gloss Materials using Neural Networks.* Konrad E. Prokott, Justus Leibig Universität (Giessen)

11:00 - *Selecting Maximally-Predictive Deep Features to Explain What Drives Fixations in Free-Viewing.* Matthias Kümmerer, University of Tübingen

11:30 - *Towards human retinal cones spatial distribution modeling.* Matteo Paolo Lanaro, University of Milan

12:00 - Lunch

2:00 - *Computations of top-down attention by modulating V1 dynamics.* David Berga, Universitat Autònoma de Barcelona

2:30 - *The fluid representations of networks estimating liquid viscosity.* Jan Jaap R. van Assen, NTT Communication Science Laboratories

3:00 - *Functional organization of cortical maps for ocular dominance and light-dark polarity in primary visual cortex.* Sohrab Najafia, SUNY College of Optometry

3:30 - Break

4:00 - **Keynote:** *Human versus Machine Perception of Patterns or A Visual Turing Test: “Are you a human or a robot?”* Yanxi Liu, Penn. State University

**Friday – Motion and attention.**

9:00 - *Is the Selective Tuning Model of Visual Attention Still Relevant?* John K. Tsotsos, York University

9:30 - *Color transparency from motions of backgrounds and overlays.* Zhehao Huang, SUNY College of Optometry

10:00 - Break

10:30 - *SMILER: Consistent and Usable Saliency Model Implementations.* Toni Kunic, York University

11:00 - *A Theory to Explain the Perceived Motion Direction of Equal-Spatial-Frequency Plaid Stimuli.* George Sperling, UC Irvine

11:30 - Adjourn