

Program

Friday, May 04 - Morning Session	
8:15 – 9:00	Registration
9:00 – 9:15	Welcome
9:15 – 10:30	Session 1 — 3 talks (20 minute talk + 5 minute Q&A)
	Towards Photography Through Realistic Fog <i>Guy Sataf, Matthew Tancik, Ramesh Raskar</i>
	Focal Sweep Imaging with Multi-focal Diffractive Optics <i>Yifan (Evan) Peng, Xiong Dun, Qilin Sun, Felix Heide, Wolfgang Heidrich</i>
	Invited talk: Corner Cameras <i>Katie Bouman</i>
10:30 – 11:00	Coffee Break
11:00 – 12:00	Keynote 1 - Prof. Kyros Kutulakos, University of Toronto <i>Rethinking Structured Light</i>
12:00 – 1:30	Lunch
Afternoon Session	
1:30 – 2:45	Session 2 — 3 talks (20 minute talk + 5 minute Q&A)
	Deep Learning for the Design of Nano-photonic Structures <i>Itzik Malkiel, Michael Mrejen, Achiya Nagler, Uri Arieli, Lior Wolf, Haim Suchowski</i>
	<i>Acquiring and Characterizing Plane-to-Ray Indirect Light Transport</i> <i>Hiroyuki Kubo, Suren Jayasuriya, Takafumi Iwaguchi, Takuya Funatomi, Yasuhiro Mukaigawa, Srinivasa Narasimhan</i>
	Dynamic Heterodyne Interferometry <i>Tomohiro Maeda, Achuta Kadambi, Schechner Yoav, Ramesh Raskar</i>
2:45-3:15	Coffee Break
3:15-4:30	Session 3 -- 3 talks (20 minutes talk + 5 minutes Q&A)
	Fast and Accurate Reconstruction of Compressed Color Light Field <i>Ofir Nabati, Raja Giryes, David Mendlovic</i>
	BLADE: Filter Learning for General Purpose Computational Photography <i>Pascal Getreuer, Ignacio Garcia-Dorado, John Isidoro, Sungjoon Choi, Frank Ong, Peyman Milanfar</i>
	Invited talk: Deep HDR Image and Video Reconstruction <i>Nima Khademi Kalantari</i>
6:30-9:30	Reception at Phipps Conservatory
Saturday, May 05 - Morning Session	
8:30 – 9:00	Registration
9:00– 10:40	Session 4 —4 talks (20 minute talk + 5 minute Q&A)
	Invited talk: Looking to Listen at the Cocktail Party <i>Bill Freeman</i>
	Invited talk: Light Sensitive Displays <i>Anat Levin</i>
	Invited talk: Deep Tissue Imaging with Near-Infrared Light for Disease Detection and Monitoring <i>Jana Kainerstorfer</i>
	Invited Talk: Mobile Bio-behavioral Sensing <i>Ashutosh Sabharwal</i>
10:40 - 11:00	Coffee Break

11:00 – 12:00	Keynote 2 - Prof. Quyen Nguyen, UC San Diego <i>Molecular Navigation for Cancer Diagnosis and Surgery - Imaging Tumors and Nerves</i>
12:00 - 1:30	Lunch
Afternoon Session	
1:30 - 3:10	Session 5 — 4 talks (20 minute talk + 5 minute Q&A)
	Learning to See through Reflections <i>Meiguang Jin, Sabine Süsstrunk, Paolo Favaro</i>
	Learned Perceptual Image Enhancement <i>Hossein Talebi, Milanfar Peyman</i>
	ReBlur2Deblur: Deblurring Videos via Self-Supervised Learning <i>Huaijin Chen, Jinwei Gu, Orazio Gallo, Ming-Yu Liu, Ashok Veeraraghavan, Kautz Jan</i>
	Automatic Estimation of Modulation Transfer Functions <i>Matthias Bauer, Valentin Volchkov, Michael Hirsch, Bernhard Schölkopf</i>
3:10 - 6:30	Poster and Demo Session
6:45 -	Happy Hour at The Porch Restaurant
Sunday, May 06 - Morning Session	
8:30 – 9:00	Registration
9:00 – 10:40	Session 6 — 4 talks (20 minute talk + 5 minute Q&A)
	ADP: Automated Differentiation Ptychography <i>Sushobhan Ghosh, Youssef Nashed, Oliver Cossairt, Aggelos Katsaggelos</i>
	SH-ToF: Micro Resolution Time-of-Flight Imaging with Superheterodyne Interferometry <i>Fengqiang Li, Florian Willomitzer, Prasanna V. Rangarajan, Mohit Gupta, Andreas Velten, Oliver Cossairt</i>
	Invited Talk: Synthetic Apertures for Long Range Sub-diffraction Imaging <i>Jason Holloway</i>
	Invited Talk: Coherence Engineering and Light-Field Imaging <i>Jason Fleischer</i>
10:40 – 11:00	Coffee Break
11:00 – 12:00	Keynote 3 - Prof. Sonke Jonsen, Duke University <i>Seeing the Underwater World through the Eyes of Animals</i>
12:00 – 1:30	Lunch
Afternoon Session	
1:30 – 3:10	Session 7 — 4 talks (20 minute talk + 5 minute Q&A)
	Reconfigurable Rainbow PIV for 3D Flow Measurement <i>Jinhui Xiong, Qiang Fu, Ramzi Idoughi, Wolfgang Heidrich</i>
	Rolling Shutter Imaging on The Electric Grid <i>Mark Sheinin, Schechner Yoav, Kyros Kutulakos</i>
	Towards Transient Imaging at Interactive Rates with Single-photon Detectors <i>David Lindell, Matthew O'Toole, Gordon Wetzstein</i>
	Near-Light Photometric Stereo using Circularly Placed Point Light Sources <i>Chao Liu, Srinivasa Narasimhan, Artur Dubrawski</i>
3:10 - 3:30	Concluding Remarks and Awards Ceremony

All lectures will be held in the McConomy Auditorium in the first floor of the Cohon University Center in CMU campus.

Lunch will be in the Weigand Gym (also located in the first floor of the University Center).

Reception on Friday evening will be in the Outdoor Garden at the Phipps Conservatory.