



2016 Spring Industrial Affiliates Workshop

College of Optical Sciences, University of Arizona

Tuesday, March 29, 2016

MORNING SESSION

<u>PROGRAM TIME</u>	<u>EVENT</u>	<u>LOCATION</u>
7:45 a.m.	Welcome Breakfast	8th Floor Breakout Area
8:45 a.m.	Group Photo	3rd Floor Lobby
9:00 a.m.	Workshop Overview	Meinel 307
9:10 a.m.	Keynote Gregory Quarles, OSA Chief Scientific Officer	Meinel 307
9:45 a.m.	Research Presentations	Meinel 307
9:45 - 10:00 a.m.	Leilei Peng, Associate Professor Optical Sciences, Assistant Professor Molecular and Cellular Biology "Microscopy beyond limits with Structured Illumination"	
10:00 - 10:20 a.m.	Golchehr Noshirvani, Ph.D. Candidate (Advisor: Peng) "Bessel Light Sheet Structured Illumination Microscopy"	
10:20 - 10:40 a.m.	Yu Li, Postdoctoral Associate (Advisor: Peng) "Superresolution imaging with enhanced axial section by STED Structured Illumination Microscopy"	
10:45 a.m.	Refreshment Break	3rd Floor Lobby
11:00 a.m.	Research Presentations	Meinel 307
11:00 - 11:15 a.m.	Hong Hua, Professor of Optical Sciences, Associate Professor ECE, Associate Professor Computer Engineering "Light field AR displays"	
11:15 - 11:35 a.m.	Sheng-Huei Derek Lu, Ph.D. Candidate (Advisor: Hua) "Extended depth of field microscopy through single-shot focus scanning"	
11:35 - 11:50 a.m.	Christopher Guido, M.S. Candidate (Advisor: Greivenkamp) "Improvements to Low Coherence Interferometry for Saline Submerged Soft Contact Lenses"	
11:50 a.m. - 12:05 p.m.	Benjamin Cromey, Ph.D. Candidate and SOCK Vice President SOCK updates and announcements	
12:30 p.m.	Lunch and Industrial Affiliates Elevator Speeches Student Union Memorial Center, South Ballroom	



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AFTERNOON SESSION

<u>PROGRAM TIME</u>	<u>EVENT</u>	<u>LOCATION</u>
1:45 p.m.	Return to Meinel Building	
2:15 p.m.	Research Presentations	Meinel 307
2:15 - 2:30 p.m.	Jonathan Brand, Ph.D. Candidate (Advisor: Furenlid) "A task-based two-stage observer to classify hepatic fibrosis"	
2:30 - 2:45 p.m.	Lloyd LaComb, Research Professor of Optical Sciences "I want my Holographic TV"	
2:45 - 3:00 p.m.	Colton Bigler, Ph.D. Candidate (Advisor: Blanche) "Waveguide Pupil Expansion for Avionic Heads-Up Display (HUD) Systems"	
3:00 p.m.	Refreshment Break	3rd Floor Lobby
3:30 p.m.	Research Presentations	Meinel 307
3:30 - 3:45 p.m.	Jose Sasian, Professor of Optical Sciences, Professor of Astronomy "Optical design feats in consumer products"	
3:45 - 4:00 p.m.	Dmitry Reshidko, Ph.D. Candidate (Advisor: Sasian) "Current Trends in miniature camera lens technology"	
4:00 - 4:15 p.m.	Yufeng Yan, M.S. Candidate (Advisor: Sasian) "Photographic fisheye lenses for 35mm DSLR Cameras"	
4:15 - 4:30 p.m.	Poul Jessen, Professor & Chair of Quantum Information and Control 2016 Optics and Photonics Winter School and Workshop	
5:30 p.m.	SOck Poster Competition & Mixer - Open to All! 3rd floor lobby of the Meinel building. Heavy reception food and drink provided.	

Poster Printing and Prizes Hosted by



Wednesday, March 30, 2016

STUDENT PRESENTATIONS

<u>PROGRAM TIME</u>	<u>EVENT</u>	<u>LOCATION</u>
8:00 a.m.	Continental Breakfast	3rd Floor Lobby
8:30 a.m.	Research Presentations	Meinel 307
8:30 - 8:45 a.m.	Patrick Thrasher, M.S. Candidate (Advisor: Falco) "Focusing X-Ray Optics"	
8:45 - 9:00 a.m.	Brian Daugherty, Ph.D. Candidate (Advisor: Chipman) "TBD: Polarization, MSPI/Polaris-M/Mueller Matrix Polarimetry"	
9:00 - 9:15 a.m.	Jaden Bankhead, B.S. Candidate (Advisor: Chipman) "NIR Imaging Polarimeter"	
9:15 - 9:30 a.m.	Kevin Newman, Ph.D. Candidate (Advisor: Guyon) "Technology for the direct imaging of extrasolar planets"	
9:30 - 9:45 a.m.	John Koshel, Associate Dean of Academic Programs Educational Initiatives in the College of Optical Sciences	
9:45 a.m.	Refreshment Break	3rd Floor Lobby
10:00 a.m.	Senior Design Presentations	Meinel 307
10:00 - 10:10 a.m.	Mike Nofziger, Professor of Optical Sciences and Outreach Coordinator Introduction of Senior Design Projects	
10:10 - 10:25 a.m.	Travis Sawyer & Kyle Hawkins "Alignment of a Miniature Echelle Spectrometer"	
10:25 - 10:40 a.m.	Olivia Fehlberg & Dana Kralicek "Edmund Optics Liqua-Telecentric Autofocusing Systems"	
10:40 - 10:55 a.m.	Kaitlyn Williams & Dean Whitman "CubeSat Design Project with Commercial-Off-The-Shelf Components"	

Student Presentations continued on next page.



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STUDENT PRESENTATIONS CONTINUED

<u>PROGRAM TIME</u>	<u>EVENT</u>	<u>LOCATION</u>
11:05 a.m.	Student Five-Minute Presentations	Meinel 307
11:05 - 11:10 a.m.	Rachel Ulanich, MS Candidate (Advisor: Greivenkamp) "An Optical Scientist Approach to the Conservation and Illumination of Art"	
11:10 - 11:15 a.m.	Ashely Nied, BS Candidate "Using Thermal Inertia to Estimate Particle Size on Asteroid Bennu"	
11:15 - 11:20 a.m.	Jacob Boyer, BS Candidate "Compact and portable high-power VECSEL's"	
11:20 - 11:25 a.m.	Zachary Garrett, BS Candidate "Light Scattering in Intraocular Lenses"	
11:25 - 11:30 a.m.	Isela Howlett, Ph.D. Candidate and President of WiO Women in Optics (WiO) update	Meinel 307
11:30 a.m.	Workshop Evaluation and Feedback Session	Meinel 307
12:00 p.m.	Pizza Lunch and Farewell	3rd Floor Lobby
1:00 p.m.	Individual Company Interviews and End of Formal Workshop	