



# 2015 Fall Industrial Affiliates Workshop

College of Optical Sciences, University of Arizona

Thursday, October 8, 2015

## MORNING SESSION

<u>PROGRAM TIME</u>	<u>EVENT</u>	<u>LOCATION</u>
7:45 a.m.	<b>Welcome Breakfast</b>	8th Floor Breakout Area
8:45 a.m.	<b>Group Photo</b>	3rd Floor Lobby
9:00 a.m.	<b>Workshop Overview</b>	Meinel 307
9:05 a.m.	<b>State of the Industry</b> Tom Hausken Senior Industry Advisor, OSA	Meinel 307
9:30 a.m.	<b>Keynote: Big Initiatives</b> Thomas Koch, Dean College of Optical Sciences	Meinel 307
10:00 a.m.	<b>OSC Current Programs, Research and Student Development</b>	
10:00 - 10:15 a.m.	John Koshel, Associate Dean of Academics "Industrial Track Master's Program"	
10:15 - 10:30 a.m.	Dae Wook Kim, Research Professor "Practical Optics Workshop Update"	
10:30 - 10:45 a.m.	Mike Nofziger, Professor of Optical Sciences and Outreach Coordinator "2015-2016 Senior Design Program"	
10:45 a.m.	<b>Refreshment Break</b>	3rd Floor Lobby
11:05 a.m.	<b>Research Presentations</b>	Meinel 307
11:05 - 11:20 a.m.	Amit Ashok, Assistant Professor of Optical Sciences & Electrical & Computer Engineering "Computational Optical Imaging: Extending Depth of Field and Reducing Data Acquisition Rate"	
11:20 - 11:35 a.m.	Ronan Kerviche, Ph.D. Candidate (Advisor: Ashok) "Information-optimal Scalable Compressive Imaging System"	
11:35 - 11:55 a.m.	Joseph Lowney, Ph.D. Candidate (Advisor: Anderson) "Understanding coherence via the study of superfluid wave phenomena"	
12:15 p.m.	<b>Lunch and Industrial Affiliates Elevator Speeches</b> Dan Dunlap Stadium Club (Arizona Football Stadium, above Mirror Lab)	



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## AFTERNOON SESSION

<u>PROGRAM TIME</u>	<u>EVENT</u>	<u>LOCATION</u>
1:30 p.m.	<b>Return to Meinel Building</b>	
2:00 p.m.	<b>Research Presentations</b>	Meinel 307
2:00 - 2:15 p.m.	Jeff Kingsley, Director of Projects, Engineering and Technical Services "Large Projects Research and Industrial Collaborations"	
2:15 - 2:30 p.m.	Dr. Esther Sternberg, Research Director, Arizona Center for integrative Medicine Director, UA Institute on Place and Wellbeing, Professor of Medicine "Unobtrusive Human Monitoring in Real Life and Real Time"	
2:30 - 2:45 p.m.	Robert Norwood, Professor of Optical Sciences "Industry-Funded Research at the College of Optical Sciences: A Perspective"	
2:45 - 3:00 p.m.	Byron Cocilovo, Ph.D. Candidate (Advisor: Norwood) "Sharp Solar Hybrid Trough"	
3:00 p.m.	<b>Refreshment Break</b>	3rd Floor Lobby
3:30 p.m.	<b>Currents in Optics Outreach</b>	Meinel 307
3:30 - 3:45 p.m.	Student Optics Chapter (SOck) Update	
3:45 - 4:00 p.m.	Women in Optics (WiO) Update	
4:00 - 4:15 p.m.	Optical Sciences RiO / REU summer program 2015	
5:30 p.m.	<b>SOck Poster Competition &amp; Mixer - Open to All!</b> <b>Marriott University Park Hotel - 880 E. 2nd Street</b> <b>Madera &amp; Canyons Room</b> Transportation to the Marriott is available, see Jen Garcia at registration.	

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THE UNIVERSITY OF ARIZONA  
**College of  
Optical Sciences**

**Friday, October 9, 2015**

## STUDENT PRESENTATIONS

<u>PROGRAM TIME</u>	<u>EVENT</u>	<u>LOCATION</u>
<b>8:00 a.m.</b>	<b>Continental Breakfast</b>	3rd Floor Lobby
<b>8:30 a.m.</b>	<b>Research Presentations</b>	Meinel 307
8:30 - 8:45 a.m.	Cécile Carlson, Ph.D. Candidate (Advisor: Furenlid) "AdaptiSPECT: a pre-clinical imaging system"	
8:45 - 9:00 a.m.	Jonathan Brand, Ph.D. Candidate (Advisor: Furenlid) "Development of a model Hotelling observer to diagnose liver fibrosis"	
9:00 - 9:15 a.m.	Weston Welge, Ph.D. Candidate (Advisor: Barton) "Cancer imaging using optical coherence tomography"	
9:15 - 9:30 a.m.	Alexander Miles, Ph.D. Candidate (Advisor: Norwood) "Magneto-Optic Composites for Noninvasive Bio-imaging"	
9:30 - 9:45 a.m.	Eric H. Frater, Ph.D. Candidate (Advisor: Burge) "Projected CGH phase map alignment with phase fiducials for interferometric testing"	
9:45 - 10:00 a.m.	Travis Sawyer, BS Candidate "Using Machine Learning to Improve Image Registration"	
<b>10:00 a.m.</b>	<b>Refreshment Break</b>	3rd Floor Lobby
<b>10:30 a.m.</b>	<b>Research Presentations Continued</b>	Meinel 307
10:30 - 10:50 a.m.	Christine L. Bradley, Ph.D. Candidate (Advisor: Chipman) "Spectral Invariance Hypothesis Study of Polarized Reflectance with Ground-based Multiangle SpectroPolarimetric Imager (Ground MSPI)"	
10:50 - 11:05 a.m.	William Duncan, Ph.D. Candidate (Advisor: Schwiegerling) "Simulating Optical System Performance with Multifocal Elements and Three Dimensional Scenes"	

Student Presentations continued on next page.



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## STUDENT PRESENTATIONS CONTINUED

<u>PROGRAM TIME</u>	<u>EVENT</u>	<u>LOCATION</u>
<b>11:10 a.m.</b>	<b>Student Five-Minute Presentations</b>	Meinel 307
11:10 - 11:15 a.m.	Maryam Tanbal, BS Candidate "Optical Limiter for Advanced Pre-pulse Contrast Measurements"	
11:15- 11:20 a.m.	Jaden Bankhead, BS Candidate "Polarimetric Road Ice Detection in the Desert"	
11:20 - 11:25 a.m.	Kaitlyn Williams, BS Candidate "Axial Symmetric Optical Diffraction Bench with 3-D Printed Parts"	
11:25 - 11:30 a.m.	Kyle Hawkins, BS Optical Sciences & Engineering, BS Applied Math Candidate "Polarization based Thin Film Optimization"	
<b>11:30 a.m.</b>	<b>Workshop Evaluation and Feedback Session</b>	Meinel 307
<b>12:00 p.m.</b>	<b>"SOck-tober Fest" Lunch and Farewell</b>	3rd Floor Lobby
<b>1:00 p.m.</b>	<b>Individual Company Interviews and End of Formal Workshop</b>	