

# INDUSTRIAL AFFILIATES WORKSHOP

## MONDAY, FEBRUARY 25, 2019

| PROGRAM TIME<br>1:00 - 3:00 p.m. | EVENT<br>IA Corporate Showcase Set Up   | LOCATION Grand Ballroom, Student Union Memorial Center |
|----------------------------------|---|--|
| 3:00 - 6:00 p.m.                 | Industrial Affiliate Partner Member Corporate Showcase  |  |
| 6:00 - 7:30 p.m.                 | Dinner  |  |
| 7:30 - 9:00 p.m.                 | Showcase - Break-Down and Pack-Up<br>Please have address labels affixed to all items b<br>staff and volunteers will ensure your items are t<br>mailed out in the morning. | eing shipped. College of Optical Sciences              |







# INDUSTRIAL AFFILIATES WORKSHOP

## TUESDAY, FEBRUARY 26, 2019

| PROGRAM TIME EVENT   | LOCATION   |  |
|--|--|--|
| 7:45 a.m. Welcome Breakfast 8th Floor  | Breakout Area  |  |
| 8:45 a.m. Group Photo  | rd Floor Lobby   |  |
| 9:00 a.m. Workshop Welcome   | Meinel 307   |  |
| 9:10 a.m.  Industrial Affiliates Partner Presentation - Ball Aerospa David Chaney - "JWST Mirror Manufacturing and Test" Koby Smith - "JWST Telescope Level Assembly and Testing" Laura Coyle - "JWST Commissioning Plans" | Koby Smith - "JWST Telescope Level Assembly and Testing" |  |
| 9:55 a.m. OSC Research Presentations   |  |  |
| 9:55 - 10:15 a.m. Felipe Guzman, Associate Professor of Optical Sciences "Optomechanical Inertial Sensors"   |  |  |
| 10:15 - 10:27 a.m. Alexander Rodack, Ph.D. Student (Advisor: Jared Males) "Estimating and Correcting NCPA in Extreme-AO Coronagraphic Systems  | s in Real-time"  |  |
| 10:27 - 10:39 a.m. Charlotte Guthery, Ph.D. Student (Advisor: Michael Hart) "Theory and Development of a Hybrid Wave-front Sensor"   |  |  |
| 10:39 a.m. Break   |  |  |
| 11:00 a.m. OSC Research Presentations (cont.)  | Meinel 307   |  |
| 11:00 - 11:20 a.m.  Linran Fan, Assistant Professor of Optical Sciences "Quantum Optics Systems on Chip"   |  |  |
| 11:20 - 11:32 a.m. Farhad Akhoundi, Ph.D. Student (Adivsor: Nasser Peyghambarian) "Nanostructure Modification Using Femtosecond Laser"   |  |  |
| 11:32 - 11:44 a.m. Mohan Xu, Ph.D. Student (Advisor: Hong Hua) "Co-axial Depth Map Sensor with an Extended Depth Range"  |  |  |
| 12:00 p.m. Lunch Student Union S   | South Ballroom   |  |
| 1:20 p.m. OSC Research Presentations (cont.)   | Meinel 307   |  |
| 1:20 p.m. Harry Barrett, Regents' Professor of Optical Sciences  | Weiller 307  |  |
|  |  |  |





The University of Arizona College of Optical Sciences 1630 E. University Blvd. Tucson, AZ 85721 888-285-3415 | info@optics.arizona.edu www.optics.arizona.edu



# INDUSTRIAL AFFILIATES WORKSHOP

## TUESDAY, FEBRUARY 26, 2019, cont'd

| PROGRAM TIME  | EVENT  | LOCATION        |
|---|--|-----------------|
| 1:40 p.m.   | OSC Research Presentations (cont.)   | Meinel 307      |
| 1:40 - 1:52 p.m.                                    | Zhen (Andy) Xiong, Ph.D. Student, (Advisor: Euan McLeod) "Biomedical Sensing using Lens-free Microscopy"                       |                 |
| 1:52 - 2:04 p.m.                                    | Cheng Gong, M.S. Student (Advisor: Dongkyun Kang)<br>"Low-cost, High-speed Confocal Microscope for Imaging Human Skin in Vivo" |                 |
| 2:04 - 2:16 p.m.                                    | Matthew Noyes, M.S. Student (Advisor: Michael Hart) "Orbital Mechanics and Viability of Satellite Laser Guide Stars"           |                 |
| 2:16 - 2:28 p.m.                                    | Alex Lin, Ph.D. Student (Advisor: Matthew Kupinski) "Point Spread Function Modeling for Gamma-Ray Imaging Systems"             |                 |
| 2:28 - 2:40 p.m.                                    | Travis Sawyer, Ph.D. Student (Advisor: Jennifer Barton)<br>"In Vivo Multiphoton Imaging of an Ovarian Cancer Mouse Model"      |                 |
| 2:40 p.m.   | Break  | 3rd Floor Lobby |
| 3:10 p.m.   | OSC Research Presentations (cont.)   | Meinel 307      |
| 3:10 - 3:30 p.m.                                    | Dal Wilson, Assistant Professor of Optical Sciences<br>"Ultra-high-Q Nanomechanical Resonators in the Spotlight"               | e.ii jo         |
| 3:30 - 3:42 p.m.                                    | Daniel Hemmer, Ph.D. Student (Advisor: Poul Jessen) "Metrology Below the Standard Quantum Limit"                               |                 |
| 3:42 - 4:02 p.m.                                    | Logan Richardson, Post-doctoral Researcher (Supervisor: Felipe Guzman) "Quantum-optomechanical and atom interferometry"        |                 |
| 4:02 - 4:52 p.m. Student "Rapid Fire" Presentations |  |                 |
| 4 4.9- 4  | A variety of student research presentations - 5 minutes each   |                 |
| 4:52 p.m.   | Review of OSC Research Presentations   | Meinel 307      |
| 5:30 p.m.   | Student Poster Session  Poster Sessions (look for details in your agenda packet) Refreshments provided.                        | 3rd Floor Lobby |







## INDUSTRIAL AFFILIATES WORKSHOP

## WEDNESDAY, FEBRUARY 27, 2019

| PROGRAM TIME                         | EVENT  | LOCATION                   |
|--------------------------------------|--|----------------------------|
| 8:00 a.m.                            | Continental Breakfast  | 3rd Floor Lobby            |
| 9:00 a.m.                            | Tours: Open Labs (schedule will be provided)   |                            |
| <b>9:00 a.m.</b><br>9:00 - 9:12 a.m. | OSC Research Presentations Isaac Trumper, Ph.D. Student (Advisor: Dae Wook Kim)  | Meinel 307                 |
| 3.00 J.12 a                          | "Optical Design with Freeform Elements; a Parametric Fitness Function for Selecting a Surface"   |                            |
| 9:12 - 9:24 a.m.                     | Michael Grace, Ph.D. Student (Advisor: Saikat Guha) "Resolving Beyond the Rayleigh Limit with Limited Prior Inform   | ation"                     |
| 9:24 - 9:36 a.m.<br>9:36 - 9:48 a.m. | Joshua Rodriguez, M.S. Student (Advisor: Yuzuru Takashima) "High-speed LIDAR by Multi-order Laser Beam Steering with Di Jingwei Wu, Ph.D. Student (Advisor: Xiushan Zhu) "High power 976-nm fiber amplifier"   | gital Micro Mirror Device" |
| 9:48 a.m.                            | Break  | 3rd Floor Lobby            |
| 10:30 a.m.                           | Breakout Session in Optical Sciences Academic Program R. John Koshel, Associate Dean of Academics, College of Optical Sciences "Updates: OSC Recruiting; Winter School and REU; Curriculum changes; Quantum information; Opto-mechanics degree options and classes; and more." |                            |
| 12:00 p.m.                           | Farewell Pizza Party Lunch   | 3rd Floor Lobby            |
|                                      |  |                            |

## Thank you for joining us!





The University of Arizona College of Optical Sciences 1630 E. University Blvd. Tucson, AZ 85721 888-285-3415 | info@optics.arizona.edu www.optics.arizona.edu