

**Panel on Review of Selected Divisions of the
National Institute of Standards and Technology (NIST)
Engineering Laboratory (EL)
May 14-16, 2024**

**SUB-PANEL AGENDA
MEASUREMENT SCIENCE FOR ADDITIVE MANUFACTURING
(All times are EDT)**

Tuesday, May 14, 2024

For activities before 12:30 p.m., please see the master agenda.

DATA GATHERING SESSIONS (OPEN TO THE PUBLIC)

Location: Building 101, Heritage Room

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| 12:30 – 2:30 p.m. | Goal Overview: Advanced Manufacturing, Automation and Autonomous Systems , Kevin Jurrens, <i>Division Chief, Intelligent Systems Division, Engineering Laboratory (EL)</i> ; Simon Frechette, <i>Division Chief, Systems Integration Division, EL</i> |
| 2:30 – 3:15 p.m. | Program Overview: Measurement Science for Manufacturing Robotics , Jeremy Marvel, <i>Manipulation and Mobility Systems Group, EL</i> |
| 3:15 – 3:30 p.m. | <i>Break</i> |
| 3:30 – 4:15 p.m. | Program Overview: Measurement Science for Additive Manufacturing , Paul Witherell, <i>Process Engineering Group, EL</i> |
| 4:15 – 5:00 p.m. | Program Overview: Advanced Manufacturing Data Infrastructure and Analytics , Simon Frechette, <i>Division Chief, Systems Integration Division, EL</i> |

For activities before 5:00 p.m., please see the master agenda.

Wednesday, May 15, 2024

DATA GATHERING SESSIONS (OPEN TO THE PUBLIC)

Location: Building 207 (Meet at Building 101 – to get on the NIST bus to Lab Tour)

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| 9:00 – 10:00 a.m. | Emergency Response Robotics , Elena Messina, <i>NIST Associate, EL</i> |
| <i>Location: Building 207, Conference Room</i> | |
| 10:00 – 10:45 a.m. | Digital Twins for Manufacturing , Simon Frechette, <i>Division Chief, Systems Integration Division, EL</i> ; Guodong Shao, <i>Life Cycle Engineering Group, EL</i> |
| 10:45 – 11:00 a.m. | <i>Break/Transition</i> |
| <i>Location: Building 221, Room B61</i> | |
| 11:00 – 11:45 a.m. | Additive Manufacturing Metrology Testbed (AMMT) and Fundamentals of Laser-Matter Interaction (FLaMI) , Brandon Lane,
500 Fifth Street, NW, Washington, DC 20001
Phone: 202.334.3311 Fax: 202.334.2791 E-mail: jmyska@nas.edu |

Acting Group Leader, Ho Yeung, and David Deisenroth, Production Systems Group, EL

11:45 a.m. – noon *Break/Transition*

Location: Building 101, Heritage Room

Noon – 1:00 p.m. **Working Lunch with Postdocs and Early Career Staff**

1:00 – 1:15 p.m. *Transition*

Breaks as needed throughout the afternoon

Location: Building 304, Rooms 124-126

1:15 – 2:45 p.m. **Additive Manufacturing Research Center**, Brandon Lane, *Acting Group Leader, Production Systems Group, EL*; Paul Witherell, *Process Engineering Group, EL*

2:45 – 3:00 p.m. *Transition*

Location: Building 233, Room B103

3:00 – 3:30 p.m. **Additive Manufacturing Surface Metrology and X-ray Computed Tomography**, Jason Fox and Felix Kim, *Production Systems Group, EL*

Location: Building 233, Room A120

3:30 – 4:00 p.m. **Additive Manufacturing Powder Metrology and Powder Spreading Testbed**, Vipin Tondare and Jordan Weaver, *Production Systems Group, EL*

Location: Building 233, Room A119

4:00 – 4:30 p.m. **Laser Processing Diffraction Testbed**, Ho Yeung, *Production Systems Group, EL*

4:30 – 5:00 p.m. **Wrap-up**

For activities after 5:00 p.m., please see the master agenda.