

APS Workshop 11: Advanced Spectroscopy and LERIX (ASL) Workshop

Friday, May 13, Morning

- 9:15 – 9:30 Shelly Kelly (Argonne National Laboratory)
Introduction and Welcome
- 9:30 – 10:00 Xiaoyi Zhang (Argonne National Laboratory)
Time-resolved Program at 25-ID
- 10:00 – 10:15 Break
- 10:15 – 10:45 Mikhail Solovyev (Rutgers University)
*Introduction to Resonant and Non-resonant Hard X-ray Emission Spectroscopy:
Principles and Uses*
- 10:45 – 11:15 Inhui Hwang (Argonne National Laboratory)
X-ray Emission Data Processing and Analysis Using Machine Learning
- 11:15 – 11:45 Jenny Lockard (Rutgers University)
*Resonant and Non-resonant X-ray Emission Spectroscopy Studies of Metal Organic
Frameworks under Different Host-guest and External Perturbation Conditions*
- 11:45 – 12:00 Morning Discussion
- 12:00 Adjourn Session 1

Friday, May 13, Afternoon

- 1:00 – 1:30 Zou Finfrock (Argonne National Laboratory)
*High-energy Resolution Fluorescence Detection Capability Development at
Sector 20-ID*
- 1:30 – 2:00 Tsun-Kong (TK) Sham (University of Western Ontario)
*Science of Photon-in Photon-out Spectroscopy and Microscopy from Tender to
Hard X-rays with High-energy Resolution*
- 2:00 – 2:30 Gerald Seidler (University of Washington)
The Design and Scientific Opportunities of the LERIX Upgrade
- 2:30 – 3:00 George Sterbinsky (Argonne National Laboratory)
*Dispersive X-ray Absorption Spectroscopy for High-resolution
Chemical Mapping*
- 3:00 – 3:15 Break

- 3:15 – 3:45 Burak Guzelturk (Argonne National Laboratory)
Time-resolved Atomic Pair Distribution Function (TR-PDF) Capability and Science Cases
- 3:45 – 4:15 Jin Yu (Argonne National Laboratory)
Application of X-ray Transient Absorption Spectroscopy in the Field of Solar Energy Conversion
- 4:15 – 4:45 Eli Kinigstein (Lawrence Berkeley National Laboratory)
Progress in Time-resolved X-ray Transient Absorption Spectroscopy Instrumentation at the APS
- 4:45 – 5:00 Wrap-up and Discussion
- 5:00 Adjourn