

WORKSHOP #3

Current and Potential Soft and Tender X-ray Spectroscopy and Scattering Capabilities at NSLS-II

*Organizers: Steve Hulbert (BNL-NSLS-II), Claudio Mazzoli (BNL-NSLS-II), Andrew Walter (BNL-NSLS-II),
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To explore new areas where Soft and Tender X-ray spectroscopy and scattering can provide valuable information in high priority science areas. In particular; Information Technology & Microelectronics, Energy storage, Catalysis, and Magnetic & Quantum devices. A broader perspective on current and potential capabilities of the SXSS program at NSLS-II will also be presented and discussed.

Start Time (ET)	Title	Speaker (Affiliation)
	Chair: Aswin Anbalagan Moderator: Andrew Walter	
9:00 – 9:15 am	Introduction to NSLS-II's Soft and Tender X-ray spectroscopy and scattering Program.	Steve Hulbert (BNL)
9:15 – 9:30 am	Overview of the proposed CST beamline.	Claudio Mazzoli (BNL)
9:30 – 9:45 am	Overview of the proposed HTS beamline.	Andrew Walter (BNL)
9:45 – 10:00 am	Discussion	
10:00 – 10:30 am	Resonant soft x-ray reflectivity: Progress, challenges, and opportunities.	Steve May (Drexel University)
10:30 – 11:00 am	Break	
	Chairs: Hojoon Lim, Elio Vescovo Moderator: Claudio Mazzoli	
11:00 – 11:30 am	Coupling lattice and magnetism in PbTiO ₃ /SrRuO ₃ Heterostructures.	John Freeland (Advanced Photon Source)
11:30 – 12:00 pm	Tuning charge, spin and orbital degrees of freedom in oxide heterostructures.	Fred Walker (Yale University)
12:00 – 12:30 pm	Simplified coherent x-ray scattering from soft through tender wavelengths by structuring the beam footprint.	Alex Frano (University of California, San Diego)
12:30 – 12:55 pm	Break	
12:55 – 1:00 p.m.	X-ray Beam Monitors and Imaging with Sydor	Benjamin Martin and Valerie Fleischauer (Sydor Technologies)
	Chairs: Anil Rajapitamahuni, Ira Waluyo Moderator: Andrew Walter	
1:00- 1:30 pm	Development of Zero-Cobalt Zero-Strain Cathode Active Materials for Sustainable and Earth Abundant Lithium-Ion Batteries	Huolin Xin (UC Irvine)
1:30 – 2:00 pm	Structural Properties of Superconductor-Semiconductor Heterostructures.	Javad Shabani (New York University)

2:00 – 2:30 pm	Exploring frustrated magnets with coherent resonant x-rays.	Kemp Plumb (Brown University)
2:30 – 3:00 pm	Break	
	Chairs: Andi Barbour Moderator: Claudio Mazzoli	
3:00 – 3:30 pm	Thermal spin fluctuations in disordered exchange-coupled films probed by x-ray photon correlation spectroscopy.	Robert Streubel (University of Nebraska-Lincoln)
3:30 – 4:30 pm	Discussion and Closing Remarks	