

# NSLS-II Strategic Planning Workshop

**Thursday, September 24**

Start	Finish			
8:00 am	8:30 am	Breakfast (provided) - Physics Lounge		
		<b>Plenary Session</b> Large Physics Seminar Room - Chair: <i>Qun Shen</i>		
8:30 am	8:45 am	Welcoming Remarks - <i>Jim Misewich</i>		
8:45 am	9:30 am	NSLS-II Overview and Current Status - <i>John Hill</i>		
9:30 am	10:15 am	Strategic Plan and Beamline Development Process - <i>Qun Shen</i>		
10:15 am	10:45 am	Coffee Break - Physics Lounge		
		<b>Invited Facility Talks</b> Large Physics Seminar Room - Chair: <i>Donald Weidner (UEC Vice-Chair)</i>		
10:45 am	11:15 am	Status and Perspectives of Next Generation SR Facilities - <i>Gerd Materlik (U College London)</i>		
11:15 am	11:45 am	Beamlines Selection at MAX IV - <i>Franz Hennies (MAX-IV)</i>		
11:45 am	12:45 pm	Lunch (provided) - Physics Lounge	<b>Focused Session on Industry</b> Small Physics Seminar Room - Co-Chairs: <i>Jun Wang &amp; Jean Jordan-Sweet</i>	
		<b>Break-Out Sessions</b>		
		<b>Invited Talks:</b> <b>Emerging Properties from Complexity</b> Large Physics Seminar Room Chair: <i>Ignace Jarrige</i>	<b>Invited Talks:</b> <b>Materials Discovery &amp; Operando</b> Hamilton Seminar Room Chair: <i>Ken Evans-Lutterodt</i>	<b>Invited Talks:</b> <b>Mesoscale Imaging Biology &amp; Environment</b> Large CFN Conference Room Chair: <i>Juergen Thieme</i>
1:00 pm	1:30 pm	Coherent X-ray Imaging: Future is Bright! <i>Oleg Shpyrko (UC San Diego)</i>	Millimeters to Nanometers: The Evolution of Real-Time In-Situ X-Ray Measurements <i>Paul Fuoss (ANL)</i>	Synchrotron Techniques for Mesoscale Science in Earth and Environmental Studies <i>Tony Lanzirotti (U of Chicago)</i>
1:30 pm	2:00 pm	Characterization and Manipulation of Competing Electronic Phases in Strongly Correlated Matter <i>Mathieu LeTacon (Max Planck Inst)</i>	Multi-scale, Operando Studies of Evolving, Heterogeneous Systems <i>Joel Brock (CHESS)</i>	Soft X-ray Tomography of Cells: Going Beyond Fluorescence and Electrons <i>Carolyn Larabell (UC San Francisco)</i>
2:00 pm	2:30 pm	Beam Lines & Functional Polymers: Past, Present, & Future Needs <i>Christopher Soles (NIST)</i>	High-Pressure Soft X-ray Spectroscopy for In Situ Characterization of Chemical Reactions <i>Jinghua Guo (ALS)</i>	Micro Crystals in Lipidic Cubic Phase to Study Enzyme Function <i>Filippo Mancia (Columbia U Medical Center)</i>
2:30 pm	3:00 pm	Coffee Break - Physics Lounge	Coffee Break - entry Hamilton Sem. Rm.	Coffee Break - entry CFN Conf Room
		<b>Contributed Concept Talks:</b> <b>Emerging Properties from Complexity</b> Large Physics Seminar Room Chair: <i>Ron Pindak</i>	<b>Contributed Concept Talks:</b> <b>Materials Discovery &amp; Operando</b> Hamilton Seminar Room Chair: <i>Klaus Attenkofer</i>	<b>Contributed Concept Talks:</b> <b>Mesoscale Imaging Biology &amp; Environment</b> Large CFN Conference Room Chair: <i>Sean McSweeney</i>
3:00 pm	4:30 pm	See Contributed Talk Schedule	See Contributed Talk Schedule	See Contributed Talk Schedule
		<b>Events</b>		
5:00 pm	6:00 pm	Reception - NSLS-II Lobby		
5:30 pm	6:30 pm	Tours NSLS-II		
		Dinner - on your own		

**Friday, September 25**

Start	Finish			
8:00 am	8:30 am	Breakfast (provided) - Physics Lounge		
		<b>Invited Facility Talk :</b> Large Physics Seminar Room - Chair: <i>Paul Zschack</i>		
8:30 am	9:00 am	The Next Step in the Exploitation of Storage Ring Based X-ray Sources - <i>Harald Reichert (ESRF)</i>		
		<b>Break-Out Sessions</b>		
		<b>Contributed Concept Talks:</b> <b>Emerging Properties from Complexity</b> Large Physics Seminar Room Chair: <i>Stuart Wilkins</i>	<b>Contributed Concept Talks:</b> <b>Materials Discovery &amp; Operando</b> Hamilton Seminar Room Chair: <i>Eric Dooryhee</i>	<b>Contributed Concept Talks:</b> <b>Mesoscale Imaging Biology &amp; Environment</b> Large CFN Conference Room Chair: <i>Lisa Miller</i>
9:30 am	11:00 am	See Contributed Talk Schedule	See Contributed Talk Schedule	See Contributed Talk Schedule
11:00 am	11:30 am	Coffee Break - Physics Lounge		
		<b>Break-Out Summaries</b> Large Physics Seminar Room - Chair: <i>Qun Shen</i>		
11:30 am	12:30 pm	<i>Klaus Attenkofer, Eric Dooryhee, Ron Pindak, Sean McSweeney, Lisa Miller, Stuart Wilkins</i>		
12:30 pm	1:30 pm	Lunch (provided) - Physics Lounge		

# NSLS-II Strategic Planning Workshop

## Contributed Talk Break-Out Sessions

### Thursday, September 24 (3:00 pm - 4:30 pm)

Emerging Properties from Complexity - Bldg 510 - Large Physics Seminar Room	
Chair: Ron Pindak ( <i>BNL</i> )	Introduction to complexity in hierarchical architectures
Garth Williams ( <i>BNL</i> )	The Bragg CDI (Robinson/Shpyrko) concept: Coherent diffraction for determining materials properties and response
Alessandro Cunsolo ( <i>BNL</i> )	Probing the dynamics & structure of polyamorphic/metastable phases of materials under extreme metastable conditions
Yong Cai ( <i>BNL</i> )	HIX revisited - a scanning nanoprobe for imaging exotic excitations in complex systems
Konstantine Kaznatcheev ( <i>BNL</i> )	Soft x-ray SpectroMicroscopy Facility (STXM/TXM) for Materials Research
Materials Discovery & Operando - Bldg 555 - Hamilton Seminar Room	
Chair: Klaus Attenkofer ( <i>BNL</i> )	Introduction to Operando
Jose Rodriguez ( <i>BNL</i> )	New Suite of Catalysis Beamlines
Eric Stach ( <i>BNL</i> )	Combining Operando X-ray Absorption Spectroscopy and Sub-Ångstrom Electron Microscopy (XEM)
Don Weidner ( <i>SBU</i> )	High Pressure Research in the Earth Sciences at the NSLS II
Ignace Jarrige ( <i>BNL</i> )	A Multiplexed Soft X-ray Emission Spectrometer as a Fast Operando Probe of Valence States
Randy Headrick ( <i>U. of Vermont</i> )	ISR-2: Coherent X-ray beamline for in-situ and in-operando hard X-ray studies
Mesoscale Imaging in Environmental & Biological Sciences - Bldg 735 - Large CFN Conf Room (Second Floor)	
Co-Chairs: Lisa Miller & Sean McSweeney ( <i>BNL</i> )	Introduction to Mesoscale Imaging In Environmental and Life Sciences
Ryan Tappero ( <i>BNL</i> )	Development of a X-ray Fluorescence Nanoprobe Spectroscopy and Tomography Beamline on the Canted Branch of SRX
Konstantine Kaznatcheev ( <i>BNL</i> )	Development of soft x-ray STXM as 3PW branch line
Nick Simos ( <i>BNL</i> )	Meso-scale real time radiography and phase contrast at NSLS-II coupled with multi-scale, multi-physics numerical simulations for the Subsurface Energy Frontier

### Friday, September 25 (9:30 am - 11:00 am)

Emerging Properties from Complexity - Bldg 510 - Large Physics Seminar Room	
Chair: Stuart Wilkins ( <i>BNL</i> )	Introduction to complexity in correlated electron systems
Garth Williams ( <i>BNL</i> )	The time-resolved Fresnel CDI/holography concept: Imaging structural dynamics with coherent sources.
Mengkun Liu ( <i>SBU</i> )	Nanoscale Infrared Spectroscopy Endstation for the MET Beamline
Lewis Wray ( <i>New York Univ</i> )	Possibilities for a nano-resolved RIXS/ARPES dual-branch beamline
Gabriel Kotliar ( <i>BNL</i> )	Nano-ARPES+RIXS
Konstantine Kaznatcheev ( <i>BNL</i> )	Technical Performance of nano-ARPES/ RIXS soft x-ray beamline
Materials Discovery & Operando - Bldg 555 - Hamilton Seminar Room	
Chair: Eric Dooryhee ( <i>BNL</i> )	Introduction to Materials Discovery
Elaine DiMasi ( <i>BNL</i> )	NSLS-II Opportunities for Energy Storage Materials
Simon Billinge ( <i>BNL/Columbia U</i> )	Multi-modal analysis for complex material characterization
Miriam Rafailovich ( <i>SBU</i> )	Operando Analysis of the 3-D Additive Manufacturing Process
Jeff Keister ( <i>BNL</i> )	MID and materials imaging
John Smedley ( <i>BNL</i> )	Topography and Detector Development - A Modular Endstation Approach