## NSLS-II Strategic Planning Workshop

### Thursday, September 24

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
<th>Chair/Co-Chairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am</td>
<td>Breakfast (provided) - Physics Lounge</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>8:30 am</td>
<td>Welcoming Remarks - Jim Misewich</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>8:30 am</td>
<td>NSLS-II Overview and Current Status - John Hill</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>9:30 am</td>
<td>Strategic Plan and Beamline Development Process - Qun Shen</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>10:45 am</td>
<td>Invited Facility Talks</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
</tr>
<tr>
<td>11:15 am</td>
<td>Status and Perspectives of Next Generation SR Facilities - Gerd Materlik</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>11:45 am</td>
<td>Lunch (provided) - Physics Lounge</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>1:00 pm</td>
<td>Coherent X-ray Imaging: Future is Bright!</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>1:30 pm</td>
<td>Characterization and Manipulation of Competing Electronic Phases in Strongly Correlated Matter</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>2:00 pm</td>
<td>Beam Lines &amp; Functional Polymers: Past, Present, &amp; Future Needs</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>2:30 pm</td>
<td>Coffee Break - entry Hamilton Sem. Rm.</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>3:00 pm</td>
<td>Contributed Concept Talks</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>4:30 pm</td>
<td>See Contributed Talk Schedule</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>5:00 pm</td>
<td>Events</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>5:30 pm</td>
<td>Tours NSLS-II</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<tr>
<td>6:00 pm</td>
<td>Dinner</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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### Friday, September 25

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<thead>
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<td>8:30 am</td>
<td>The Next Step in the Exploitation of Storage Ring Based X-ray Sources - Harald Reichert (ESRF)</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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<td>9:30 am</td>
<td>Contributed Concept Talks</td>
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<td>Coffee Break - Physics Lounge</td>
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<td>11:30 am</td>
<td>Contributed Concept Talks</td>
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<td>Qun Shen</td>
</tr>
<tr>
<td>12:30 pm</td>
<td>Lunch (provided) - Physics Lounge</td>
<td>Large Physics Seminar</td>
<td>Qun Shen</td>
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### Emerging Properties from Complexity - Bldg 510 - Large Physics Seminar Room

**Chair:** Ron Pindak (BNL)

- **Introduction to complexity in hierarchical architectures**

**Garth Williams (BNL)**

- The Bragg CDI (Robinson/Shpyrko) concept: Coherent diffraction for determining materials properties and response

**Alessandro Cunsolo (BNL)**

- Probing the dynamics & structure of polyamorphic/metastable phases of materials under extreme metastable conditions

**Yong Cai (BNL)**

- HIX revisited - a scanning nanoprobe for imaging exotic excitations in complex systems

**Konstantine Kaznatcheev (BNL)**

- Soft x-ray SpectroMicroscopy Facility (STXM/TXM) for Materials Research

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**Materials Discovery & Operando - Bldg 555 - Hamilton Seminar Room**

**Chair:** Klaus Attenkofer (BNL)

- **Introduction to Operando**

**Jose Rodriguez (BNL)**

- Combining Operando X-ray Absorption Spectroscopy and Sub-Ångstrom Electron Microscopy (XEM)

**Don Weidner (SBU)**

- High Pressure Research in the Earth Sciences at the NSLS II

**Ignace Jarrige (BNL)**

- A Multiplexed Soft X-ray Emission Spectrometer as a Fast Operando Probe of Valence States

**Randy Headrick (U. of Vermont)**

- ISR-2: Coherent X-ray beamline for in-situ and in-operando hard X-ray studies

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**Mesoscale Imaging in Environmental & Biological Sciences - Bldg 735 - Large CFN Conf Room (Second Floor)**

**Co-Chairs:** Lisa Miller & Sean McSweeney (BNL)

- **Introduction to Mesoscale Imaging in Environmental and Life Sciences**

**Ryan Tappero (BNL)**

- Development of a X-ray Fluorescence Nanoprobe Spectroscopy and Tomography Beamline on the Canted Branch of SRX

**Konstantine Kaznatcheev (BNL)**

- Development of soft x-ray STXM as 3PW branch line

**Nick Simos (BNL)**

- Meso-scale real time radiography and phase contrast at NSLS-II coupled with multi-scale, multi-physics numerical simulations for the Subsurface Energy Frontier

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

**Emerging Properties from Complexity - Bldg 510 - Large Physics Seminar Room**

**Chair:** Stuart Wilkins (BNL)

- **Introduction to complexity in correlated electron systems**

**Garth Williams (BNL)**

- The time-resolved Fresnel CDI/holography concept: Imaging structural dynamics with coherent sources.

**Mengkun Liu (SBU)**

- Nanoscale Infrared Spectroscopy Endstation for the MET Beamline

**Lewis Wray (New York Univ)**

- Possibilities for a nano-resolved RIXS/ARPES dual-branch beamline

**Gabriel Kotliar (BNL)**

- Nano-ARPES+RIXS

**Konstantine Kaznatcheev (BNL)**

- Technical Performance of nano-ARPES/ RIXS soft x-ray beamline

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**Materials Discovery & Operando - Bldg 555 - Hamilton Seminar Room**

**Chair:** Eric Dooryhee (BNL)

- **Introduction to Materials Discovery**

**Elaine DiMasi (BNL)**

- NSLS-II Opportunities for Energy Storage Materials

**Simon Billinge (BNL/Columbia U)**

- Multi-modal analysis for complex material characterization

**Miriam Rafailovich (SBU)**

- Operando Analysis of the 3-D Additive Manufacturing Process

**Jeff Keister (BNL)**

- MID and materials imaging

**John Smedley (BNL)**

- Topography and Detector Development - A Modular Endstation Approach