NSLS-II IXS Early Science Workshop Program

Tuesday, October 1, 2013. Berkner Hall (Bldg 488), Room B.

Program:
Introduction (moderator: Clement Burns)
08:00 – 08:10 Clement Burns (WMU): Welcome – Workshop Scope & Purpose (10 mins)
08:10 – 08:40 Paul Zschack (BNL): Welcome – Status and Science Readiness of NSLS-II (30 mins)
08:40 – 09:10 Yong Cai (BNL): Status of the IXS Beamline and Scientific Capabilities (30 mins)

Liquids and Disordered Systems (moderator: Alessandro Cunsolo)
09:10 – 09:40 Tullio Scopigno (Universita’ La Sapienza): Skinny tails and new cases for Liquids and Glasses (30 mins)
09:40 – 10:10 Alexandr Chumakov (ESRF): High-resolution IXS to resolve puzzles of glasses (30 mins)
10:10 – 10:40 Keith A. Nelson (MIT): Study of collective structural dynamics on multiple frequency and wavevector scales (30 mins)
10:40 – 11:00 Coffee Break (20 mins)

Soft Matter and Colloidal Systems (moderator: Andrei Fluerasu)
11:00 – 11:30 Alexei Sokolov (University of Tennessee): Connection between slow and fast dynamics in glass-forming systems and polymers (30 mins)
11:30 – 12:00 Alessandro Cunsolo (BNL): Phonon propagation in programmable assemblies of nanoparticles (30 mins)
12:00 – 13:00 Lunch Break (60 mins)

Biological Systems (moderator: Lin Yang)
13:00 – 13:30 Sow-Hsin Chen (MIT): Hydration water in protein is crucial to the “softening” of the short time intraprotein collective vibrations of specific length scale (30 mins)
13:30 – 14:00 Maikel Rheinstädter (McMaster): Frontiers in membrane biophysics (30 mins)
14:00 – 14:20 Coffee Break (20 mins)

Extreme Environments (moderator: Yong Cai)
14:20 – 14:50 Ho-Kwang Mao (CIW): Tailoring high-pressure IXS experiments for the energy, flux, and resolution of NSLS-II (30 mins)
14:50 – 15:20 Jung-Fu “Afu” Lin (UT Austin): *Studying elasticity of materials in extreme environments using high energy resolution IXS* (30 mins)

Open Discussion (moderator: Clement Burns)

15:20 – 15:50 Yury Shvyd’ko (APS): *High Contrast Inelastic X-ray Scattering with sub-meV Resolution - First Implementation* (30 mins)

15:50 – 18:00 Contributed presentations and open discussion. 
Topics for open discussion:
(1) Potential experiments and teams
(2) Required sample environments
(3) Future upgrades (more analyzers, Q-range, 0.1 meV resolution) and science drivers

Summary

18:00 – 18:15 Clement Burns: Workshop Summary and Plan Moving Forward

18:30 – 20:30 Workshop Dinner