AGENDA
Workshop on New Science Opportunities Provided by a Multi-bend Achromat Lattice at the APS
October 21 & 22, 2013

Day 1 (October 21, 2013)

Plenary Session Location - 402 Auditorium

Start	Finish	Time	Description	Speaker
9:00	9:10	0:10	Welcome	Eric Isaacs
9:10	9:55	0:45	The MBA Lattice - Building the Next Generation Storage Ring	Brian Stephenson
9:55	10:10	0:15	***Break***	
10:10	10:20	0:10	Workshop Organization and Breakout Session Logistics	Dean Haeffner
10:20	11:00	0:40	Source Properties of a Potential MBA Lattice at the APS	Glenn Decker
11:00	11:30	0:30	Optics, Detector, and Instrumentation Developments for High Brightness x-ray Sources	Dennis Mills
11:30	13:00	1:30	***Working Lunch: Q&A Discussions from the Plenary Session***	***Location - Lower Gallery***
13:00	17:00	4:00	Breakout Sessions	See Breakout Sessions for Room Location

Breakout Sessions
Day 1 (October 21, 2013)

Scanning Probe Imaging Location - 401/A5000

13:00	13:45	0:45	Technical Opportunities Enabled by the MBA APS Upgrade	Stefan Vogt
13:45	14:30	0:45	Opportunities for Energy Sciences	Rafael Jarmillo/Tonio Buonassisi
14:30	15:15	0:45	Visualizing the Opportunities of Next-Generation Nanoelectronics Using Scanning Probe Imaging	Conal Murray
15:15	15:30	0:15	***Break***	
15:30	16:15	0:45	Scientific Opportunities in Earth, Planetary and Enviromental Sciences	Steve Sutton
16:15	17:00	0:45	Unique Opportunities for the Life Sciences	Gayle Woloschak
17:00	18:00	1:00	Discussion and "Open Mic" Presentations - Opportunity for all to present an idea with one slide.	All

Coherent Diffraction and Phase Contrast Imaging, XPCS Location - 401/E1100

13:00	13:30	0:30	Future Perspectives of Coherent Diffraction with a Brighter Storage Ring	Ian Robinson
13:30	14:00	0:30	Using Coherent X-rays to Study Disordered Materials	Mark Sutton
14:00	14:30	0:30	High Resolution In-vivo Phase Contrast Micro Tomography for Developmental Biology	Ralf Hoffman
14:30	15:00	0:30	Prospects for XPCS on Biophysical System	Larry Lurio
15:00	15:15	0:15	***Break***	
15:15	17:00	1:45	Short Presentations	
			CNM Science	Ian McNulty & Martin Holt
			Fluid Dynamics and Fast Dynamics in Solids	Kamel Fezzaa
			Nano Particles and Dynamics	Ross Harder

			Nano-Rheology in Complex Fluids	Suresh Narayanan
			Dynamics in High-Q Range	Alex Sandy
			Laser Initialized Mesoscopic Dynamics in Multiferroics	Haiden Wen
			High Pressure	Wenge Yang
			Science Opportunities for MB Latties with Ptychography & Coherent Imaging	David Vine

Timing and Dynamics Location - 402 Auditorium

13:00	13:15	0:15	Welcome and Overview - Timing on MBA Machine	David Keavney
13:15	13:45	0:30	Update on Picosecond Science with X-rays	Linda Young
13:45	14:15	0:30	Bunch Structure and Nuclear Resonant Scattering: Challenges and Opportunities	Ercan Alp
14:15	14:30	0:15	Mesoscale Dynamics in Complex Systems	Haidan Wen
14:30	14:50	0:20	Magnetization Dynamics and X-Ray Spectroscopy: Opportunities and Challenges at Low Emittance Storage Rings	Dario Arena
14:50	15:10	0:20	Discussion	
15:10	15:30	0:20	***Break***	
15:30	16:00	0:30	Combining Coherence and Dynamics to Probe Novel Electronic Materials	Paul Evans
16:00	16:30	0:30	Picosecond Photobiology: What Can We Do Today and What Would We Like To Do Tomorrow?	Phil Anfinrud
16:30	17:00	0:30	Time Resolved Coherent Diffraction Imaging	Ian Robinson
17:00	17:30	0:30	Discussion	

Interface and Single Crystal Diffraction Location - 438/C010

13:00	13:30	0:30	Introduction	Jon Tischler
13:30	14:00	0:30	XRIM	Paul Fenter
14:00	14:45	0:45	Coherent Diffraction from Surfaces	Hoydoo You
14:45	15:30	0:45	Crystal Growth	Jeff Eastman
15:30	16:00	0:30	Scientific Opportunities Using High Brightness Source	Joel Brock
16:00	16:30	0:30	Coherence for Critical Behavior & Thin Film Growth	Tai C. Chang
16:30	17:00	0:30	Diffuse	Ray Osbourne/ Sephan Rosenkranz

Structural and High Energy Scattering, SAXS Location - 431/C010

13:00	13:15	0:15	Introduction	Jan Ilavsky
13:15	13:40	0:25	Nanoscale X-ray Diffraction for Ultralight Elements in Ultrahigh Pressures	David Mao
13:40	14:05	0:25	Scientific Opportunities for High Energy X-ray Diffraction with an MBA Lattice	Robert Suter
14:05	14:30	0:25	In-Situ Study of Dumbbell Nucleation	Elena Shevchenko
14:30	14:55	0:25	New Opportunities for Solar Fuels and Electrochemical Energy Conversion Analysis Using In-Situ Hard X-ray Scattering	Dave Tiede
14:55	15:10	0:15	***Break***	
15:10	15:35	0:25	In-Situ Diffraction and Imaging Studies of Transient and Irreversible Phenomena in Materials	Todd Hufnagel
15:35	16:00	0:25	Prediction and Accelerated Laboratory Discovery of Heterogeneous Catalysts	Kenneth Poeppelmeier
16:00	17:00	1:00	Discussion and Report Writing	

Spectroscopy and Inelastic Scattering Location - 401/Lower Gallery

13:00	13:15	0:15	Opening Remarks	Steve Heald
13:15	13:45	0:30	Catalyst and Energy Science	Simon Bare
13:45	14:30	0:45	Inelastic Scattering	Clem Burns - NIXS
13:45	14:30	0:45	MBA and RIXS	Young-June Kim
14:30	15:00	0:30	Nuclear Resonant Scattering	Ercan Alp
15:00	15:15	0:15	***Break***	
15:15	16:00	0:45	Science at Extreme Conditions	David Mao and Daniel Haskel
16:00	17:00	1:00	Other Topics and General Discussion	Steve Heald

Macromolecular Crystallography Location - 401/A1100

13:00	13:30	0:30	Overview of Committee Recommendations, and Beamline Performance	Bob Fischetti
13:30	14:00	0:30	Mitigating Radiation Damage	Gerd Rosenbaum
14:00	14:30	0:30	Sampling, Handling, and Alignment Techniques	Malcolm Capel
14:30	15:00	0:30	Ultra-High Mulitplicity to Detect a Weak Phasing Signal	Janet Smith
15:00	15:30	0:30	How to Think About Diffraction Data From Tiny Crystals	Steve Harrison
15:30	16:00	0:30	Town Hall Discusssion	All
16:00			Adjourn	

Day 2 (October 22, 2012)

Start	Finish	Time	Description	
9:00	11:00	2:00	**Breakout Discussion and Report Preparation Location - See Monday Breakout Session**	
11:00	11:00	0:00	**Workshop Reports and Plenary Discussion Location - 402 Auditorium**	
11:00	11:30	0:30	Timing and Dynamics	David Keavney/Paul Evans
11:30	12:00	0:30	Coherent Diffraction and Phase Contrast Imaging, XPCS	Jin Wang/Ian Robinson
12:00	13:30	1:30	***Working Lunch: Q&A Discussions from Breakouts Sessions Location - Lower Gallery***	
13:30	13:30	0:00	**Workshop Reports and Plenary Discussion (cont.) Location - 402 Auditorium**	
13:30	14:00	0:30	Scanning Probe Imaging	Stefan Vogt/Tonio Buonassisi and Rafael Jaramillo
14:00	14:30	0:30	Interface and Single Crystal Diffraction	Jon Tischler/Paul Fuoss
14:30	15:00	0:30	Structural and High Energy Scattering, SAXS	Jan Ilavsky/Lyle Levine
15:00	15:30	0:30	Spectroscopy and Inelastic Scattering	Steve Heald/Clem Burns
15:30	16:00	0:30	Macromolecular Crystallography	Robert Fischetti/Bill Weis
16:00	16:30	0:30	Workshop Closeout	Workshop Committee