NSLS-II Strategic Planning Workshop and SRI 2015 Report

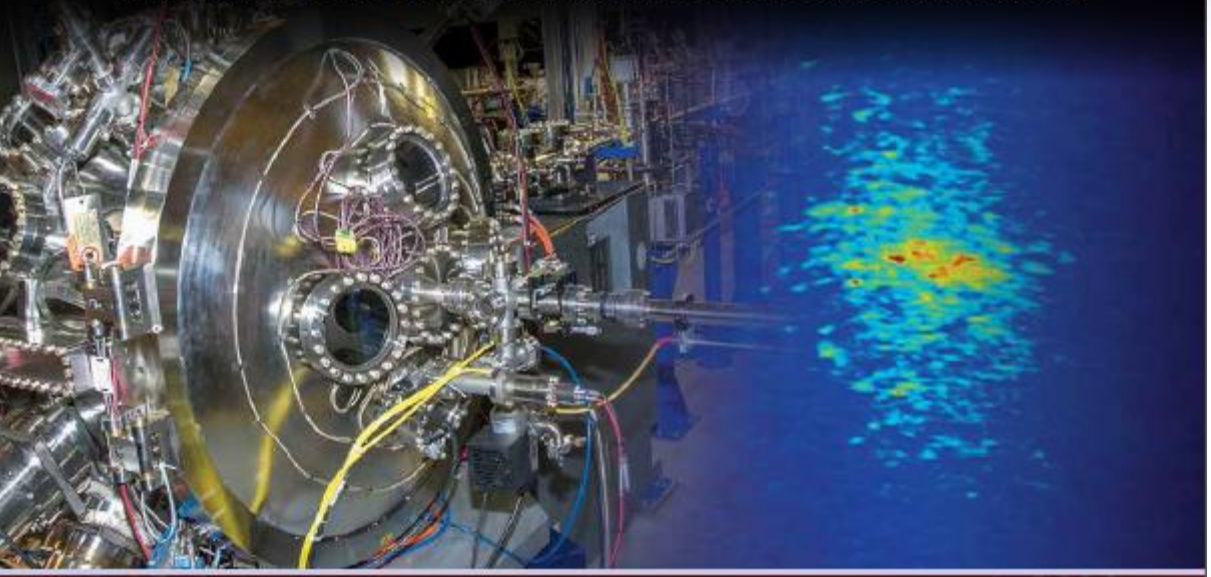
Qun Shen

UEC Town Meeting

August 5, 2015

NSLS-II Strategic Planning Workshop

Continuing the development of beamlines to advance science and technology



September 24-25, 2015
Brookhaven National Laboratory
www.bnl.gov/nsls2spw

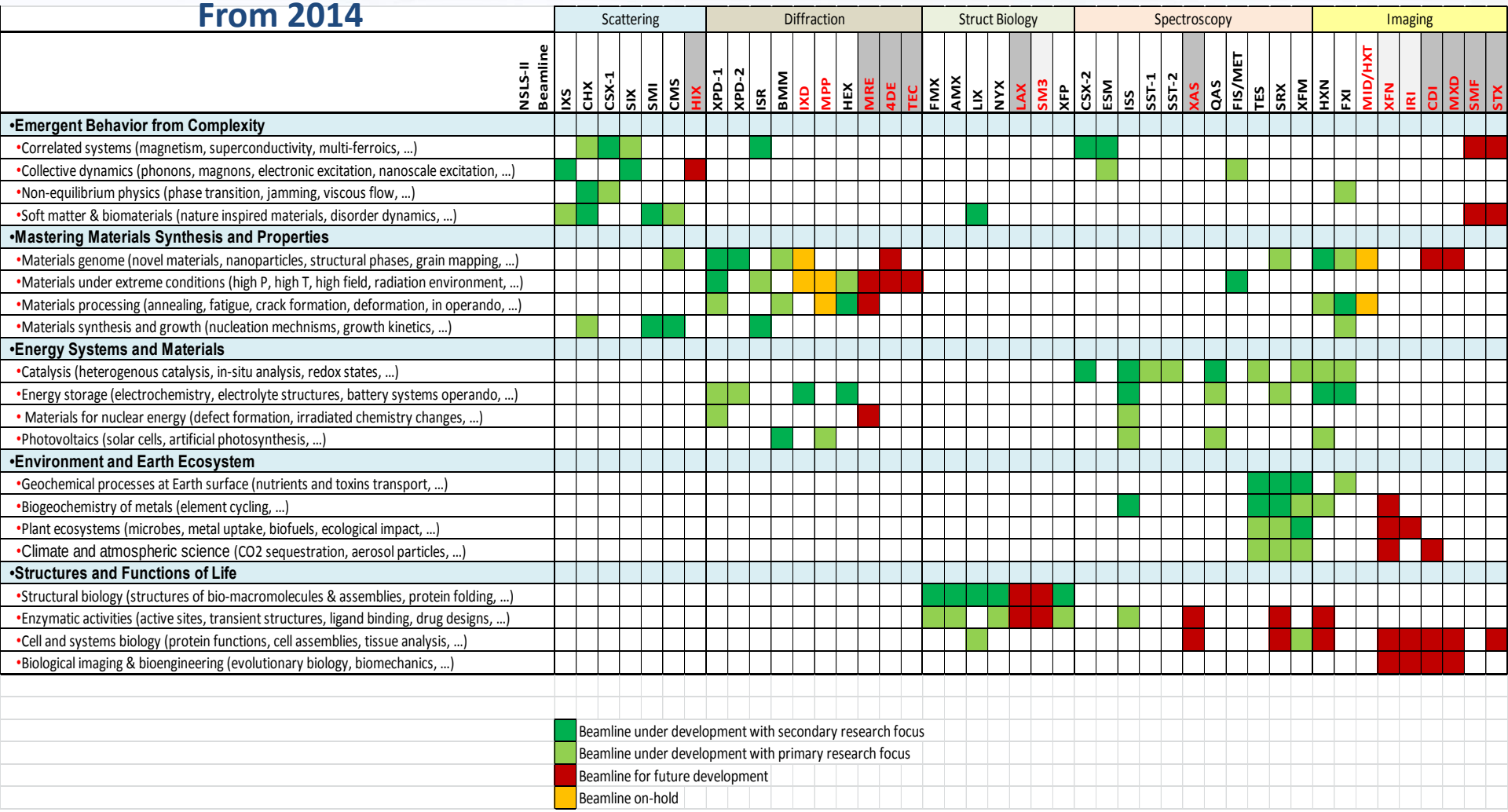
The 2015 NSLS-II Strategic Planning Workshop will launch selection of the next wave of NSLS-II beamlines. Following review of the current NSLS-II strategic plan and the new beamline development process, invited presentations from leaders in the field will provide background for the central focus of the workshop – an 'Open Call' for contributed talks from the User Community on new beamline concepts and the partnerships to drive them.

Workshop Goals:

- Review NSLS-II current suite of capabilities and identify capability gaps
- Identify opportunities for development of world-leading capabilities or novel approaches
- Identify shortages in capacity
- Identify university /industry and NSLS-II co-leads to drive the development of new beamline concepts

Strategic Planning Process in Progress

From 2014



Workshop Agenda

NSLS-II Strategic Planning Workshop

Thursday, September 24

		Plenary Session
Start	**Finish**	Large Physics Seminar Room
8:00 am	8:30 am	**Breakfast** (provided) - Physics Lounge
8:30 am	8:45 am	*Welcoming Remarks - Jim Misewich*
8:45 am	9:30 am	*Strategic Plan & Workshop Charge - John Hill*
9:30 am	10:15 am	*Beamline Development Process - Qun Shen*
10:15 am	10:45 am	**Coffee Break** - Physics Lounge
10:45 am	11:15 am	*Gerd Materlik (UCL)*
11:15 am	11:45 am	*Franz Hennies (MAX-IV)*
11:45 am	12:45 pm	**Lunch** (provided) - Physics Lounge

		Break-Out Sessions		
		Emerging Properties from Complexity	**Materials Discovery & Operando**	**Mesoscale Imaging Biology & Environment**
Start	**Finish**	Large Physics Seminar Room	Hamilton Seminar Room	Large CFN Conference Room
1:00 pm	1:30 pm	*Oleg Shpyrko (UC San Diego)*	*Paul Fuoss (ANL)*	*Tony Lanzirotti (ANL)*
1:30 pm	2:00 pm	*Mathieu LeTacon (Max Planck Inst)*	*Joel Brock (CHESS)*	*Carolyn Larabell (UC San Francisco)*
2:00 pm	2:30 pm	*Christopher Soles (NIST)*	*Jinghua Gou (ALS)*	*So Iwata (SACLA)*
2:30 pm	3:00 pm	**Coffee Break -** Physics Lounge	**Coffee Break** - entry Hamilton Sem. Rm.	**Coffee Break** - entry CFN Conf Room
3:00 pm	4:30 pm	**Concept Talks**: *Emerging Prop Complexity*	**Concept Talks**: *Mat Discovery & Operando*	**Concept Talks**: *Meso Imaging Bio & Enviro*

		Events
5:00 pm	6:00 pm	**Reception** - NSLS-II Lobby
6:00 pm	6:30 pm	**Tours NSLS-II**
		Dinner - on your own

Co-sponsored by NSLS-II UEC

Workshop Agenda

NSLS-II Strategic Planning Workshop

Friday, September 25

		Plenary Session		
Start	**Finish**	Large Physics Seminar Room		
8:00 am	8:30 am	**Breakfast** (provided) - Physics Lounge		
8:30 am	9:00 am	*Harald Reichert (ESRF)*		
		Break-Out Sessions		
Start	**Finish**	**Emerging Properties from Complexity** Large Physics Seminar Room	**Materials Discovery & Operando** Hamilton Seminar Room	**Mesoscale Imaging Biology & Environment** Large CFN Conference Room
9:30 am	11:00 am	**Concept Talks**: *Emerging Prop Complexity*	**Concept Talks**: *Mat Discovery & Operando*	**Concept Talks**: *Meso Imaging Bio & Enviro*
		Plenary Session		
11:00 am	11:30 am	**Coffee Break** - Physics Lounge		
		Large Physics Seminar Room		
11:30 am	12:30 pm	**Break-Out Summaries**		
12:30 pm	1:30 pm	**Lunch** (provided) - Physics Lounge		

- Everyone is invited to participate in this important event
- This workshop will launch the development process for the next rounds of beamlines at NSLS-II
- Beamline development proposals (BDPs) will follow an updated procedure https://www.bnl.gov/nsls2spw/files/pdf/BDP-Process.pdf

Four Steps in Beamline Development Process

- Discuss with NSLS-II management to determine whether the proposed concept is aligned with the strategic plan for the facility and likely to meet all of the review criteria (next slide)
- Submit a Beamline Development Pre-Proposal (BDPP, up to 3 pages).
  - 1st BDPP deadline is October 30, 2015. Future BDPPs can be submitted by GUP deadlines. BDPPs are reviewed by NSLS-II management with solicited external input as required
  - If a BDPP is approved, NSLS-II commits to partnering with the BDPP team in developing a high-quality BDP, including committing resources to hold a workshop and to assist in beamline pre-conceptual design
- Submit the BDP before the assigned BDP submission deadline
  - BDP is up to 10 pages and is similar in structure to the BDPP with each section providing more detailed information
- Prepare the Funding Proposal(s) for submittal
  - At this stage, an integrated project team will be formed comprised of NSLS-II staff including scientific, engineering, and project controls support together with selected members of the BDP team

BDP Review Criteria

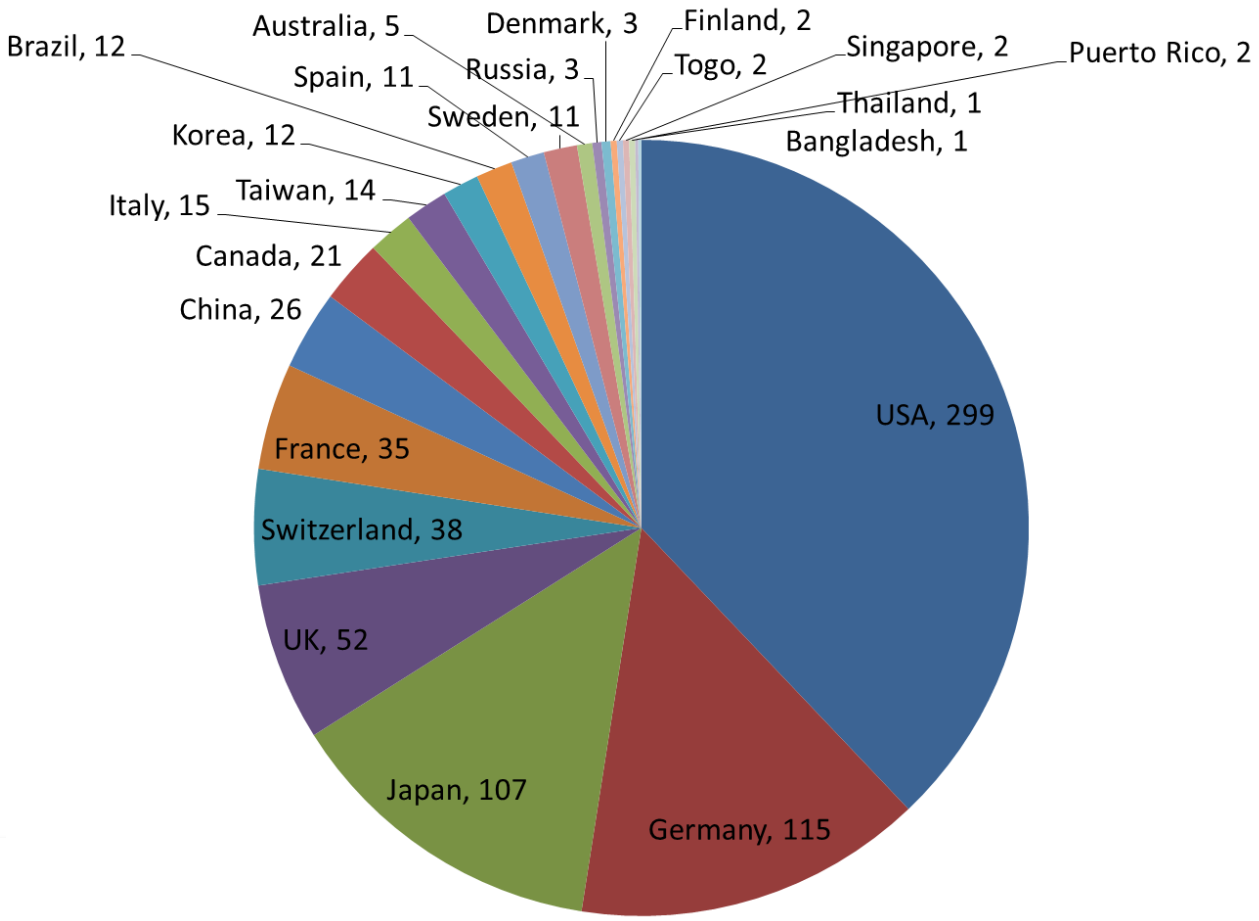
- Science Case:
  - Potential to address important scientific and/or societal questions, and consistent with the facility goals as stated in the NSLS-II Strategic Plan
- Funding:
  - Credible potential funding scenario for the projected beamline costs
- User Demand:
  - Evidence of interest, engagement, and support by the user community
- Performance:
  - Performance necessary to fulfill its scientific mission, with characteristics well matched to the NSLS-II source
- Technical Feasibility
- Portfolio Impact:
  - Contribute to a balanced NSLS-II portfolio of beamline techniques and complement beamline resources at other synchrotron facilities
- Quality of Proposers

International Conference SRI
July 6-10, 2015

Co-sponsored by a number of sponsors including NSLS-II UEC

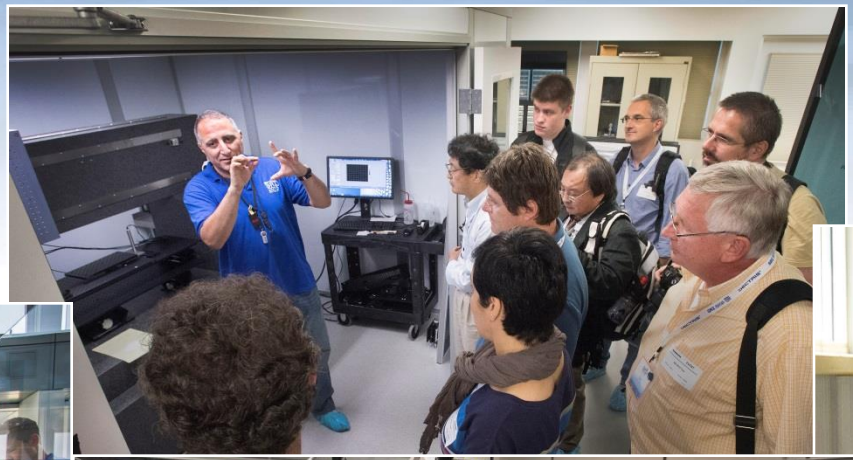
Keynote & Plenary Talks	14
Oral Presentations	175
Poster Presentations	438
Total	627

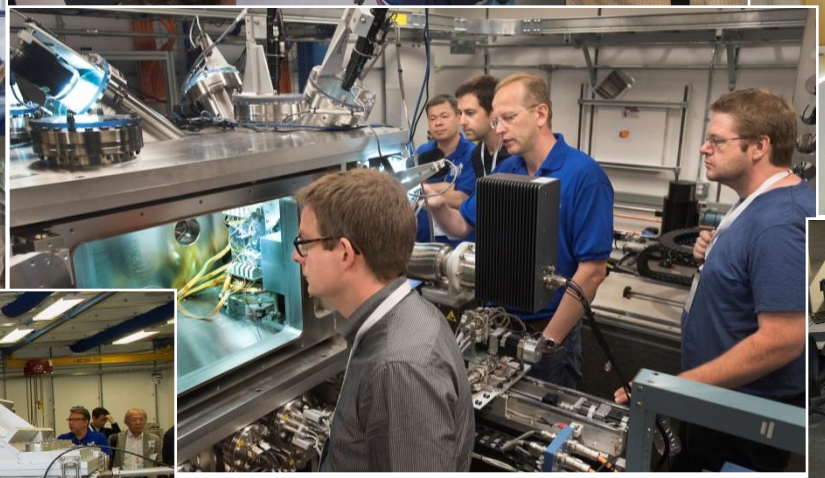
789 Registered Participants Representing 23 Countries

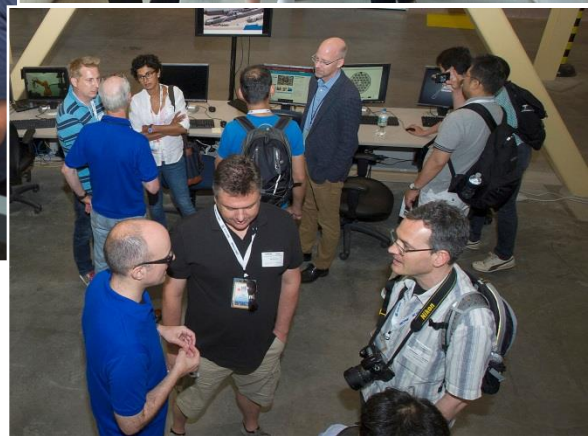


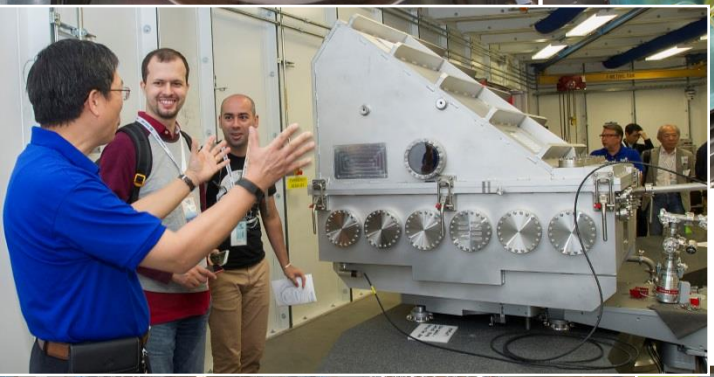
USA	299
Germany	115
Japan	107
UK	52
Switzerland	38
France	35
China	26
Canada	21
Italy	15
Taiwan	14
Korea	12
Brazil	12
Spain	11
Sweden	11
Australia	5
Russia	3
Denmark	3
Finland	2
Togo	2
Singapore	2
Puerto Rico	2
Thailand	1
Bangladesh	1

SRI 2015
NEW YORK CITY

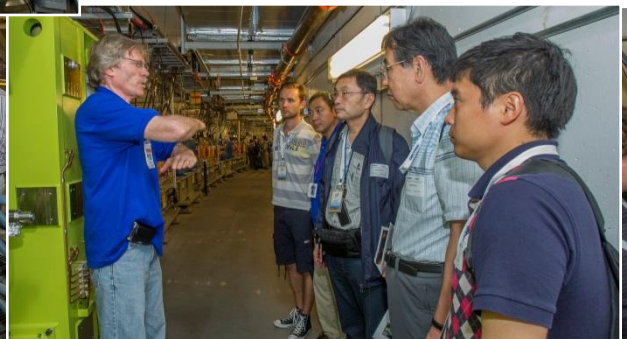








NSLS-II Tour



SRI 2015
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Well Attended Plenary & Oral Sessions

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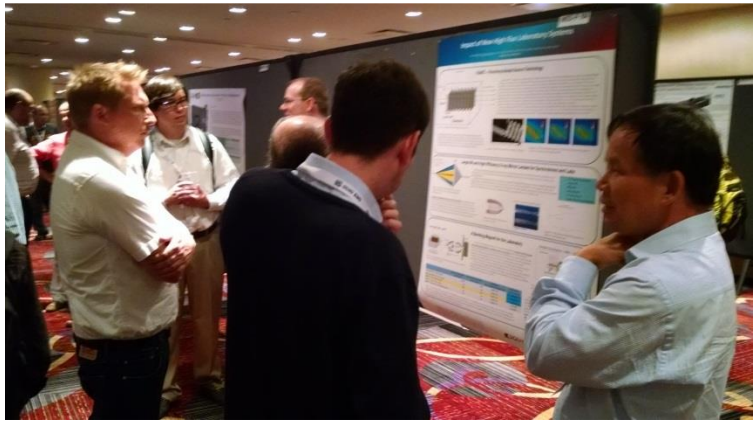
Vendor Exhibition and Poster Sessions



67 vendors
438 posters

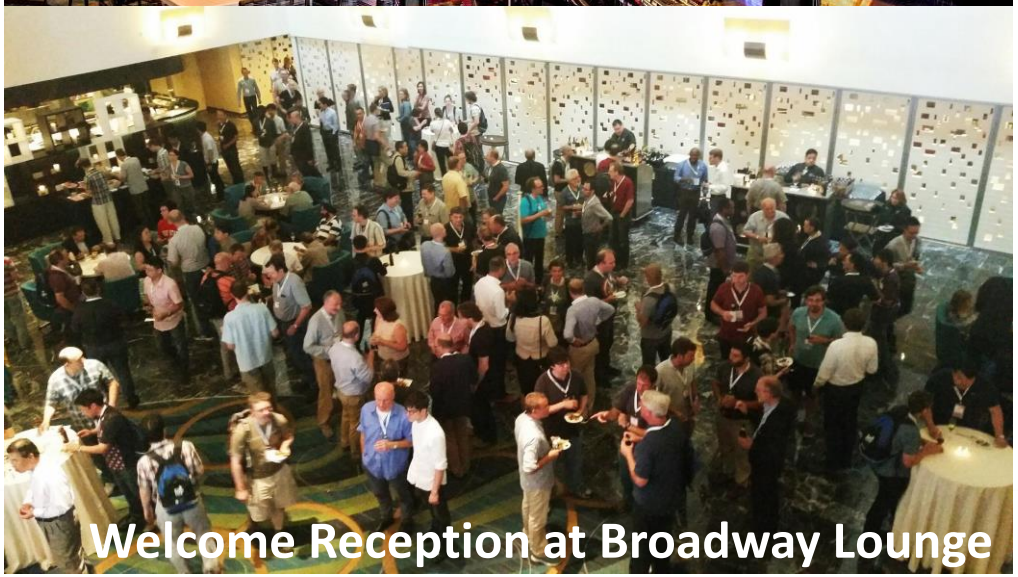
SRI 2015
NEW YORK CITY

Banquet Dinner

Broadway Ballroom, 6th Floor
Marriott Marquis, New York City
Thursday, July 9, 7:00 PM - 9:30 PM

After-Dinner Speaker:
Professor Joel Hurowitz
Stony Brook University

NASA's Mars 2020 Rover Mission: The PIXL in-situ X-ray Investigation and Opportunities for the Analysis of Returned Martian Samples



Welcome Reception at Broadway Lounge

~430 dinner attendees

Next SRI will be in Taipei, late May 2018

TPS
Taiwan Photon Source

SRI 2018

INTERNATIONAL CONFERENCE FOR SYNCHROTRON RADIATION INSTRUMENTATION

TAIPEI, TAIWAN