

# AGENDA — SUNDAY, AUGUST 14<sup>TH</sup> & MONDAY, AUGUST 15<sup>TH</sup>

## Sunday, August 14th

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07:00-09:00 Evening Welcome Reception Location: Room KC405-406 (4th floor)  
*Sponsored by IACS*

## Monday, August 15th

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**Session 1** **STREAMING DATA ANALYSIS** Location: Eisner & Lubin Auditorium (4th floor)  
**Kerstin Kleese van Dam, Chair**

TIME	SPEAKER	TITLE
08:45-09:00	WELCOME REMARKS: Kerstin Kleese van Dam, Director of BNL'S Computational Science Initiative (CSI)	
09:00-09:45	<b>Scott Klasky, ORNL - KEYNOTE</b>	“Everything you always wanted to know about Scientific EXascale data but were afraid to ask.”
09:45-10:20	Valerio Pascucci, Utah SCI Institute	“A Scalable Cyberinfrastructure for Interactive Visualization of Terascale Microscopy Data”
10:20-10:50	BREAK	<i>Sponsored by JUNIPER</i>
10:50-11:25	Mathew Thomas, PNNL	“Enabling Re-executable Workflows with Near-real-time Visualization, Provenance Capture and Advanced Querying for Mass Spectrometry Data”
11:25-12:00	Shinjae Yoo, BNL	“Streaming Manifold Learning and DOE Applications”
12:00-12:35	Steffen Frey, University of Stuttgart	“Auto-Tuning Intermediate Representations for in-Situ Visualization”
12:35-01:10	Klaus Mueller, Stony Brook University	“A Visualization Framework for Streaming Multivariate Data”
01:10-02:30	<i>Lunch on your own</i>	

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**Session 2** **LONG TERM DATA STORAGE, CURATION AND SHARING** Location: Eisner & Lubin Auditorium (4th floor)  
**Klaus Mueller, Chair**

02:30-03:15	<b>K. John Wu, LBNL - KEYNOTE</b>	“Searching Workflow Documentation with MPO”
03:15-03:50	David Yu, BNL	“Deep Storage for Scientific Data”
03:50-04:20	BREAK	<i>Sponsored by NVIDIA</i>
04:20-04:55	Joshua Stillerman, MIT	“A General Purpose Tool-set for Representing Data Relationships: Converting Data into Knowledge”
04:55-05:30	Xishuang Dong, Center of Excellence in Research and Education for Big Military Data Intelligence (CREDIT)	“Deep Learning based Ensemble Method for Named Entity Recognition in Electronic Medical Records”
05:30-06:05	Boyu Zhang, Purdue University	“Data Storage and Sharing for the Long Tail of Science”

*DINNER ON YOUR OWN*

## Tuesday, August 16th

**Session 3**      **EXPERIMENTAL DATA ANALYSIS**      Location: Eisner & Lubin Auditorium (4th floor)  
**Robert Harrison, Chair**

TIME	SPEAKER	TITLE
08:45-09:00	WELCOME REMARKS: Robert Harrison, Director of Institute for Advanced Computational Science (IACS); Chief Scientist at BNL, CSI	
09:00-09:45	<b>Leslie Greengard,</b> <b>Simons Foundations for Data</b> <b>Analysis - KEYNOTE</b>	“Fast Algorithms for Inverse Problems in Acoustic Scattering and Cryo-electron Microscopy”
09:45-10:20	Le Hou, Stony Brook University	“Automatic Histopathology Image Analysis with CNNs”
10:20-10:50	BREAK	<i>Sponsored by ARISTA</i>
10:50-11:25	Dantong Yu, BNL	“Deep Learning for Analyzing NSLS-II Data Stream”
11:25-12:00	Rasmi Elasmr, Columbia University	“Computer Vision Experiments in Crowdsourced Astronomy”
12:00-12:35	Sameera Abeykoon, BNL	“Streaming Data Analysis Tools to Study Structural Dynamics of Materials”
12:35-02:00	<i>Lunch on your own</i>	

**Session 4**      **INDUSTRY SOLUTIONS AND**  
**AND CHALLENGES FOR BIG DATA**      Location: Eisner & Lubin Auditorium (4th floor)  
**Marjaneh Issapour, Chair**

02:00-02:45	<b>S. Ryan Quick, PayPal, KEYNOTE</b>	“Leveraging “Right Now”: Concepts, Challenges, and Direction for Analytics on the Wire”
02:45-03:20	Dimitri Katramatos, BNL	“Streaming Data Analysis on the Wire”
03:20-03:40	BREAK	<i>Sponsored by IACS</i>
03:40-04:15	Karan Bhatia, Google	“Accelerating Science with Google Cloud Platform”
04:15-04:50	Rick Gilmore, Pennsylvania State University	“Curating Identifiable Data for Sharing: The Databrary Project”
04:50-05:35	<b>Jeb Linton, IBM Watson, KEYNOTE</b>	“Security and Risk in the Cognitive Era”
05:45-06:45	POSTER SESSION	Location: Room 914 (9th floor)
07:00-09:00	WORKSHOP DINNER <i>Sponsored by IACS and IBM</i>	Location: Grand Hall (5th floor)

# AGENDA — WEDNESDAY, AUGUST 17<sup>TH</sup>

## Wednesday, August 17th

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**Session 5**      **CONVERGENCE OF DATA AND HPC**      Location: Eisner & Lubin Auditorium (4th floor)  
Barbara Chapman, Chair

TIME	SPEAKER	TITLE
08:45-09:00	WELCOME REMARKS: Juliana Freire, Professor of Computer Science and Engineering and Data Science; Executive Director, NYU Moore-Sloan Data Science Environment	
09:00-09:45	<b>Salman Habib, ANL - KEYNOTE</b>	“High Performance Computing for Data-Intensive Tasks: Friend or Foe?”
09:45-10:20	Nikolay Malitsky, BNL	“Bringing the HPC Reconstruction Algorithms to Big Data Platforms”
10:20-10:50	BREAK	<i>Sponsored by: CRAY</i>
10:50-11:25	Todd Elsethagen, PNNL	“Data Provenance Hybridization Supporting Extreme-Scale Scientific Workflow Applications”
11:25-12:00	Pavol Juhás, BNL	“DiffPy-CMI - An Extensible Software Framework for Multimodal Analysis of Atomic Structure of Materials”

*END OF CONFERENCE*