Note: All times are in Pacific Daylight Time (PDT)

Monday, October 5, 2020

Time	Topic	Speaker
8:45 a.m.	*Login and Identity Confirmation*	
9:00 a.m.	Welcome and Introduction	Stan Ruppert, LLNL
9:15 a.m.	National Nuclear Security Administration (NNSA) Headquarters Perspective and Value-Goals of Department of Energy (DOE) Data Days	Angela Sheffield, NNSA
9:30 a.m.	Keynote – Data Science Machinations, Musings, and Eureka Moments at the Joint Genome Institute (JGI)	Kjiersten Fagnan, JGI
10:00 a.m.	*Break*	

Session 1: Data Curation and Standards – Legacy Data, Existing Data, and Future Data

Time	Topic	Speaker
10:10 a.m.	Plenary – Streamlining Data Standard Documentation Through GitHub Integration	Robert Crystal-Ornelas, LBNL
10:30 a.m.	DCAT-eOS-AP: A Metadata Schema for Use in Nuclear Monitoring Projects with Applications to Other DOE Mission Areas	Katherine Anderson Aur, SNL
10:45 a.m.	Development of Data Quality Ratings for Experimental Alloy Data through DOE's eXtremeMAT Consortium	Madison Wenzlick, NETL
11:00 a.m.	*Break*	
11:15 a.m.	High Throughput Experimental Materials Database and Related Data Tools for the Experimental Laboratory	Kevin Talley, NREL
11:30 a.m.	Containerized Environment for Reproducibility and Traceability of Scientific Workflows	Paula Olaya, UT Knoxville
11:45 a.m.	Modernization of the Evaluated Nuclear Structure Data File (ENSDF)	Elizabeth McCutchan, BNL
12:00 p.m.	DOE Office of Scientific and Technical Information's (OSTI's) Approaches to Artificial Intelligence and Machine Learning for Research & Development Results	Mary Beth West, DOE OSTI Joshua Nelson, DOE OSTI
12:15 p.m.	*Break*	

Lawrence Livermore National Laboratory

Monday, October 5, 2020 (continued)

12:30 p.m.	Panel Session
	  – Moderator: Kelly Rose, NETL
		Robert Crystal-Ornelas,
		  LBNL
		Katherine Anderson Aur,
		  SNL
		Madison Wenzlick, NETL
		Kevin Talley, NREL
		Paula Olaya,
		  UT Knoxville
		Elizabeth McCutchan,
		  BNL
		Mary Beth West,
		  DOE OSTI
		Joshua Nelson, DOE OSTI

1:00 p.m.	*Adjourn*	

Tuesday, October 6, 2020

8:45 a.m.	*Login and Identity Confirmation*	
8:50 a.m.	Welcome	Tammie Borders, NNSA

Session 2: Data Intensive Computing, High Performance Computing (HPC), and Tools for DOE's Computing Communities

9:00 a.m.	Plenary – Gladier: An Architecture to Enable Modular Automation of Data Capture, Storage, and Analysis at Experimental Facilities	Ben Blaiszik, ANL
9:20 a.m.	Cross-Facility Science: The Superfacility Model at Lawrence Berkeley National Laboratory (LBNL)	Deborah Bard, LBNL
9:35 a.m.	Combined Nonnegative Tensor Factorization & Bayesian Nonparametric Models Analyzing and Managing Multidimensional Biota Data	Helen Cui, LANL
9:50 a.m.	Interactive Large-Scale Seismic Noise Analysis in the Cloud Using Python and Kubernetes	Jonathan MacCarthy, LANL
10:05 a.m.	*Break*	
10:15 a.m.	Scientific Literature Mining for X-ray Absorption Spectroscopy (XAS)	Gilchan Park, BNL
10:30 a.m.	Data Challenges in High Energy Physics Workflows	Nathan Tallent, PNNL Noah Oblath, PNNL
10:45 a.m.	Exploring the Use of Machine Learning Algorithms to Backfill Missing Traffic Data	Ambarish Nag, NREL
11:00 a.m.	*Break*	
11:15 a.m.	Panel Session – Moderator: Tammie Borders, NNSA	Ben Blaiszik, ANL Deborah Bard, LBNL Helen Cui, LANL Jonathan MacCarthy, LANL Gilchan Park, BNL Nathan Tallent, PNNL Noah Oblath, PNNL Ambarish Nag, NREL

Tuesday, October 6, 2020 (continued)

	Session 3: Cloud, HPC, and Hybrid Data Management	
11:45 a.m.	Plenary – Challenges and Opportunities for a Joint DOE Nanoscale Science Research Centers Data Platform	Maria Chan, ANL
12:00 a.m.	*Break*	
12:15 p.m.	A User-Centered Data Management System for HPC	Annette Greiner, LBNL Lisa Gerhardt, LBNL
12:30 p.m.	Evaluating Cloud Computing Capabilities to Support Scalable Data Management	Vic Baker, NETL
12:45 p.m.	Panel Session – Moderator: Tammie Borders, NNSA	Maria Chan, ANL Annette Greiner, LBNL Lisa Gerhardt, LBNL Vic Baker, NETL
1:00 p.m.	*Adjourn*	

Wednesday, October 7, 2020

8:45 a.m.	*Login and Identity Confirmation*	
8:50 a.m.	Welcome	Martin Klein, LANL
9:00 a.m.	Hackathon Concept, Goals, and Intent	Shiloh Elliott, INL

Session 4: Data Access, Sharing, and Sensitivity

9:15 a.m.	Plenary – Fostering Data Curation Throughout the Entire Life Cycle of Energy Data Management	Chad Rowan, NETL
9:35 a.m.	DOE Open Energy Data Initiative	Michael Rossol, NREL
9:50 a.m.	*Break*	
10:00 a.m.	Enhancing Research Team Collaborations in a Secure Environment with Energy Data eXchange (EDX) Drive	Daniel McFarland, NETL Chad Rowan, NETL
10:15 a.m.	The Living Laboratory: Enabling Access to Operational Data for Research and Development	Elizabeth Jurrus, PNNL
10:30 a.m.	Scalable Data Management for National Facilities Using the Modern Research Data Portal	Vas Vasiliadis, ANL
10:45 a.m.	*Break*	
11:00 a.m.	Kosh: An Open Source Data Store for Large Datasets and Machine Learning Applications	Charles Doutriaux, LLNL
11:15 a.m.	Panel Session – Moderator: Martin Klein, LANL	Chad Rowan, NETL Michael Rossol, NREL Elizabeth Jurrus, PNNL Vas Vasiliadis, ANL Charles Doutriaux, LLNL
11:45 a.m.	*Break*	

Session 5: Data Curation Collection Specific Use Cases

12:00 p.m.	Preparing for the Next 50 Years of Low-Energy Nuclear Data	Adam Hayes, BNL

Wednesday, October 7, 2020 (continued)

12:15 p.m.	A Virtual Use Case for Carbon Storage Data Curation	Paige Morkner, NETL
12:30 p.m.	DOE Office of Legacy Management Geospatial Data Lifecyle and Data Curation Project Development	Denise Bleakly, SNL
12:45 p.m.	Closing Remarks	Tammie Borders, NNSA
1:00 p.m.	*Adjourn*	