

2023 HPC Intern Showcase Agenda

Los Alamos Study Center – 2nd Floor – Jemez & Cochiti
August 10, 2023 (Unclassified)

WELCOME SESSION

8:00	Light Refreshments	All
8:25	Mini-Showcase Welcome	Julie Wiens

PRESENTATION SESSION 1

8:30	Benchmarking Effects of Erasure Scheme and MPI Configuration on MarFS Throughput	Janya Budaraju, Paul Karhnak, Zach Snyder
8:45	Charliecloud's Successful Prototype Integration with Slurm: A Promising Approach with Some Strings Attached	Layton McCafferty, Nicholas Volpe, Hank Wikle
9:00	Monitoring Clusters Using Extended Berkeley Packet Filter (eBPF)	Weston Cadena, Alexis Ng, M. Aiden Phillips
9:15	Evaluating Lustre Network Performance over InfiniBand and RoCE	David Medin, Benjamin Schuelter, Matthew Vandenberg
9:30	Seeing the trees for the forest: Describing HPC Filesystems with the Grand Unified File-Index (GUFI)	Jenna Kline
9:45	Development of a Capacity ON Demand User Interaction Toolkit (CONDUIT) Job Launch Mechanism	Christa Collins
10:00	Break	ALL
10:15	Post-Exascale Star Product Networks and Allreduce Spanning Trees	Aleyah Dawkins
10:30	Creating, Debugging, and Optimizing Roles in Shasta Keycloak for Improved Administrator Privilege Separation	Airam Flores
10:45	A year in the life of a charliecloud developer	Lucas Caudill
11:00	Improving MPI with Rust	Jacob Tronge
11:15	Detecting Spatter in Laser Powder Bed Fusion with Computer Vision	Sean Tronsen
11:30	Cray EX40 (Chicoma) Cluster Intrusion Detection Project	Daniel Wild
11:45	Pavilion test searching	Frank Keithley
12:00	Elastic Workflows with PMIx	Rajat Bhattarai

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POSTER SESSION: 12:15 - 1:30 (LUNCH PROVIDED)

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Monitoring Clusters Using Extended Berkeley Packet Filter (eBPF)	Weston Cadena, Alexis Ng, M. Aiden Phillips
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Benefits of Time Series Data Tables for HPCInfo	Kenton Romero
Seeing the trees for the forest: Describing HPC Filesystems with the Grand Unified File-Index (GUFI)	Jenna Kline
Development of a Capacity ON Demand User Interaction Toolkit (CONDUIT) Job Launch Mechanism	Christa Collins
Cray EX40 (Chicoma) Cluster Intrusion Detection Project	Daniel Wild
Detecting Anomalies in Laser Powder Bed Fusion with Computer Vision	Sean Tronsen

