

Session Program

25-29 May 2026

**28th Conference on Computing in High
Energy and Nuclear Physics (CHEP 2026)**

***Track 1 - Data and metadata organization,
management and access***

Chulalongkorn University

Monday 25 May

13:45

Track 1 - Data and metadata organization, management and access: Tape storage, archival and long-term preservation

Session | Location: Chulalongkorn University

13:45-14:03 **Fermilab's migration to CTA**

Speaker

Eric Vaandering

14:03-14:21

The Next Generation of ATLAS Data Carousel: Architecture, Performance, and Refactoring

Speakers

Fernando Harald Barreiro Megino, Mr Mikhail Borodin, Misha Borodin

14:21-14:39

Analysis of Tape Archival Metadata Based on ATLAS Run3 Recall History

Speaker

Xin Zhao

14:39-14:57

Intelligent Orchestration of Petabyte-Scale Data Staging for Physics Workflows

Speaker

Alice-Florenta Suiu

14:57-15:15

Preserving the Web-Based Interfaces of the RHIC/STAR Experiment: A Low-Maintenance Archival Strategy

Speaker

Ankush Reddy Kanuganti

15:15

16:15

Track 1 - Data and metadata organization, management and access: Rucio, data lakes and distributed data management

Session | Location: Chulalongkorn University

16:15-16:33

A new Rucio Service at CERN for Emerging and Established Experiments

Speaker

Hugo Gonzalez Labrador

16:33-16:51

interTwin Digital Twin Engine's Data Lake

Speaker

Dijana Vrbancic

16:51-17:09

A Rucio-Based Global Data Lake for the SKA Regional Centre Network

Speaker

James Collinson

17:09-17:27

Enhancing Rucio for Gravitational Wave Experiments with MADDEN

Speaker

Federica Legger

17:27-17:45

Integrating Globus as a Transfer Tool for Rucio: Bridging HEP and ASCR Data Management Infrastructure

Speakers

Benjamin Gutierrez, Doug Benjamin, Douglas Benjamin

17:45-18:03

SRCNet v0.1 and the Data Path to SKA Science

Speaker

James William Walder

18:03

Tuesday 26 May

13:45

Track 1 - Data and metadata organization, management and access: Data transfers, federations and infrastructure planning

Session | Location: Chulalongkorn University

13:45-14:03 **CMS transfer rate estimates in Run-4**

Speaker

Katy Ellis

14:03-14:21

Advancing Global Scientific Infrastructure: Ongoing Mini-Challenges and Roadmap to WLCG Data Challenge 2027 (DC27)

Speaker

Alessandra Forti

14:21-14:39 **FTS4 a first encounter with the experiments**

Speaker

Nicola Pace

14:39-14:57

ATLAS journey integrating into the SENSE/Rucio Priority Data Transfer Service

Speaker

Aashay Arora

14:57-15:15 **Building a European federation for sync and share with CERNBox**

Speaker

Diogo Castro

15:15

16:15

Track 1 - Data and metadata organization, management and access: XRootD ecosystem and data access

Session | Location: Chulalongkorn University

16:15-16:33

Designing a Unified XRootD Monitoring Framework for WLCG and experiment Operations

Speakers

Borja Garrido Bear, Panos Paparrigopoulos

16:33-16:51 **Enhancing Redirection in the CMS Data Federation**

Speaker

Rahul Chauhan

16:51-17:09

Global Profiling of Open Science Data Federation Services using the Pelican Platform

Speaker

James Letts

17:09-17:27

DataHarbor: A Secure Web Portal for Efficient Large-Scale Data Access via XRootD

Speaker

Florian Uhlig

17:27-17:45

Chasing the Bottleneck: Optimizing XRootD data servers for Columnar Analysis workloads, from I/O Wait to CPU Load

Speaker

Andrea Piccinelli

17:45-18:03

Transfer Learning based Resource Usage Prediction in In-network Caching

Speaker

Chin Guok

18:03

Wednesday 27 May

13:45

Track 1 - Data and metadata organization, management and access: Data integrity, storage reliability and evaluation

Session | Location: Chulalongkorn University

13:45-14:03

ODGDFS: A High-Performance User-Space Object Storage Engine for HEP Data Challenges

Speaker

zhuo meng

14:03-14:21

Storage tests for the German Tier-2 WLCG contribution with the NHR HPC cluster Emmy: ATLAS use case

Speaker

Inga Katarzyna Lakomic

14:21-14:39

Enhanced Data Integrity for Reliable WLCG Third-Party Copy Transfers

Speaker

Hugo Gonzalez Labrador

14:39-14:57

Data Integrity and Recovery System for Distributed Storage in ALICE

Speaker

Andreea Prigoreanu

14:57-15:15

Design and Implementation of an AI-Driven Disk Failure Prediction System for Large-Scale HEP Storage Clusters

Speaker

LI Haibo lihaibo

15:15

16:15

Track 1 - Data and metadata organization, management and access: FAIR data, metadata standards and preservation

Session | Location: Chulalongkorn University

16:15-16:33

The Paradox of persistence: Strategies for metadata versioning and FAIR publication in NAPMIX

Speaker

Mr Ivan Knezevic

16:33-16:51

Multi-Layer Metadata Architecture for Cross-Community Metadata Management in PUNCH4NFDI

Speaker

Dr Victoria Tokareva

16:51-17:09

Evolution of the ATLAS EventIndex towards HL-LHC

Speaker
Dario Barberis

17:09-17:27

Making Astroparticle Physics Data Reusable beyond Its Original Context

Speaker
Victoria Tokareva

17:27-17:45

Unified Cloud-Native Metadata Interface with Trino, Superset, and Ibis in the LZ Dark Matter Experiment

Speaker
Eli Mizrachi

17:45-18:03

ILDG 2.0: FAIR data management in Lattice QCD and beyond

Speaker
Hubert Simma

18:03

16:15

Track 1 - Data and metadata organization, management and access: Storage systems and file system protocols

Session | Location: Chulalongkorn University

16:15-16:33

Towards a standardized language-neutral StoRM Architecture

Speaker
Francesco Giacomini

16:33-16:51

dCache project status and updates

Speakers
Dmitry Litvintsev, Marina Sahakyan, Mr Tigran Mkrtchyan

16:51-17:09

Toward HPC with Recent Improvements in the dCache NFSv4.1 Interface

Speaker
Mr Tigran Mkrtchyan

17:09-17:27

CERN Storage technology explorations: Adding NFS 4.2 as a Strategic Protocol for EOS

Speaker
Andreas Joachim Peters

17:27-17:45

A Scalable Architecture for Metadata-Intensive Distributed NFS

Speaker
Andreas Joachim Peters

17:45-18:03

JWanFS: A WAN-Oriented Distributed File System for Multi-Data Center Collaboration in High Energy Physics

Speaker
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18:03

Thursday 28 May

13:45

Track 1 - Data and metadata organization, management and access: Compression and I/O optimization

Session | Location: Chulalongkorn University

13:45-14:03

Characterizing Event I/O Access Patterns in HEP Workflows Using Darshan

Speaker

Wesley Patrick Kwiecinski

14:03-14:21

Real-Time I/O Traffic Shaping in EOS

Speaker

Gianmaria Del Monte

14:21-14:39

Efficient data movement for Machine Learning inference in heterogeneous CMS software

Speaker

Felice Pantaleo

14:39-14:57

Boa Constrictor: A Mamba-based Lossless Compressor for High Energy Physics data

Speaker

Mr Akshat Gupta

14:57-15:15

Impact of Compression Algorithms on I/O performance for ATLAS MP Derivation Workflows in new ROOT data formats for analysis (RNTuple)

Speaker

Bralyne Matoukam

15:15

16:15

Track 1 - Data and metadata organization, management and access: Databases for experiment data and operations

Session | Location: Chulalongkorn University

16:15-16:33

Scaling the HSF Conditions Database Across Experiments

Speaker

Ruslan Mashinistov

16:33-16:51

CREST Conditions Data Model for HL-LHC in ATLAS

Speaker

Andrea Formica

16:51-17:09

Migration of Conditions data caching from Squid to Varnish in the ATLAS experiment

Speaker
Ilija Vukotic

17:09–17:27

Enhancing the use of the Calibration and Conditions Database in ALICE Grid jobs

Speaker
Martin Øines Eide

17:27–17:45

A Distributed Event Sourced Configuration Database for the ATLAS ITk Pixel Detector

Speaker
Gerhard Immanuel Brandt

17:45–18:03

Intelligent Database of ZTF and LSST Alerts

Speaker
Julius Hrivnac

18:03