Session Program

25–29 May 2026

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

Track 7 - Computing infrastructure and sustainability

Chulalongkorn University

Monday 25 May

13:45

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

13:45–14:03 **Standardizing HPC-resource adaptation for HEP workflows**

Speaker
Tomas Lindén

14:03–14:21
Global Grid User Support (GGUS) for WLCG and EGI: From Legacy to Next-Generation Helpdesk

Speaker
Pavel Weber

14:21–14:39
Enhancing High Availability and Disaster Recovery for Kubernetes Workloads at CERN

Speakers
Jack Charlie Munday, Ricardo Rocha

14:39–14:57 **IHEP site cluster fine-grained scheduling optimization**

Speaker
Jingyan Shi

14:57–15:15
Evolution of Kubernetes at CERN: Automated Management of Clusters and Add-ons

Speaker
Jack Charlie Munday

15:15

13:45

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

13:45–14:03 **Getting to the top**

Speaker
Mr Andrea Chierici

14:03–14:21
STARS: A representative compute metric for SRCNet radio astronomy workloads

Speakers
Pablo Llopis Sanmillan, Ms Rohini Joshi

14:21–14:39 **Benchmarking GPU Viability in Heterogeneous HEP Batch Computing**

Speaker
Tim Voigtlaender

14:39–14:57
Classification and Modeling the Performance and Scaling of Scientific Workflows with Resource-efficient Workflow Mini-apps

Speakers
Ozgur Ozan Kilic, Tianle Wang

14:57–15:15 **Hardware technology in the AI era**

Speaker
Dr Andrea Sciabà

15:15

16:15

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

16:15–16:33 **Exploiting LHCb trigger CPU and GPU resources as Analysis Facilities**

Speakers
Diogo Castro, Eduardo Rodrigues

16:33–16:51
Computing Activities at the Spanish Tier-1 and Tier-2s for the ATLAS experiment in the LHC Run3 period and towards the High Luminosity Phase (HL-LHC)

Speaker
Dr Santiago Gonzalez De La Hoz

16:51–17:09
Operating a Large GPU HPC Farm With a Small Team: Lessons from the ALICE EPN Project

Speaker
Dr Lubos Krcal

17:09–17:27 **Dynamic provision of GPUs at HPC centers for HEP**

Speaker
Nikita Shadskiy

17:27–17:45
From CPU-Centric to Accelerator-Aware: Operational Deployment of MIG and vGPU Partitioning in WLCG

Speaker
Dr Brij Kishor Jashal

17:45–18:03
A user-level network overlay to enable offloading of scientific payloads from cloud-native interfaces

Speakers
Daniele Spiga, Diego Ciangottini, Giulio Bianchini, Lucio Anderlini, Massimo Sgaravatto, Mauro Gattari, Mirko Mariotti, Rosa Petrini

18:03

16:15

Track 7 - Computing infrastructure and sustainability: Environmental sustainability I

Session | **Location:** Chulalongkorn University

16:15–16:33 **Watt Matters: cluster-level frequency control for lower CO2 in HEP**

Speaker
Emanuele Simili

16:33–16:51 **CERN IT's Approach to Environmental Sustainability**

Speaker
Daniele Massaro

16:51–17:09 **A study of heat reuse from a scientific computing facility**

Speaker
Mattias Wadenstein

17:09–17:27
Operational Experience of a Refurbished, Energy-Efficient Data Centre at Queen Mary University of London

Speaker
Dr Sudha Ahuja

17:27–17:45 **European XFEL Scientific Data Infrastructure.**

Speaker
Janusz Malka

17:45–18:03 **Monitoring Sustainability at an ATLAS Tier 2 Computing Centre**

Speaker
Miguel Villaplana

18:03

Tuesday 26 May

13:45

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

13:45–14:03

Evaluating the scalability of CERN’s HTCondor batch system towards the High-Luminosity LHC

Speaker
Antonio Delgado Peris

14:03–14:21

Accelerating Science, Decelerating Carbon: Towards Sustainable Computing in HEP

Speaker
Ricardo Rocha

14:21–14:39 **Performance optimisations for a cloud-based grid site**

Speaker
Dr Jonathan Woithe

14:39–14:57

Strengthening Vulnerability and SBOM Management in the CERN Container Registry

Speakers
Jack Charlie Munday, Ricardo Rocha

14:57–15:15 **Building a Hybrid Cloud HPC System**

Speakers
Deepak Aggrawal, Shaun de Witt

15:15

16:15

Track 7 - Computing infrastructure and sustainability: Environmental sustainability II

Session | **Location:** Chulalongkorn University

16:15–16:33

Energy-aware compute resource modulation at the WLCG PIC Tier-1 site: drainage strategies, CPU frequency scaling, and predictive control

Speaker
Jose Flix Molina

16:33–16:51 **Estimating the Carbon Footprint of Computations in the LHCb Grid**

Speaker
Henryk Giemza

16:51–17:09 **The WLCG Sustainability Forum: Progress and Directions**

Speaker
David Britton

17:09–17:27

Evaluating Performance and Power Efficiency of Ceph Storage Configurations for Large-Scale Scientific Computing

Speaker
Thomas Byrne

17:27–17:45 **Development of a Breathing Computing Center for HEP**

Speaker
Lars Sowa

17:45–18:03

The High-Low project: High-Performance Algorithms for Low Power Sustainable Hardware

Speakers
Arantza De Oyanguren Campos, Arantza Oyanguren

18:03

Wednesday 27 May

13:45

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

13:45–14:03

Toward an IPv6-native, cloud-native ATLAS site: Scalable production-ready grid storage on Kubernetes

Speaker
Ryan Taylor

14:03–14:21

The successful removal of IPv4 from WLCG wide-area network links

Speaker
Jose Flix Molina

14:21–14:39

A phased phase-out of IPv4 at a WLCG Tier-1

Speaker
Mattias Wadenstein

14:39–14:57

Workflow-Aware Traffic Classification for HEP Data Movement

Speaker
Chin Guok

14:57–15:15

Scitags at Scale: Terabit Packet Marking and WLCG Data Challenge Readiness

Speakers
Marian Babik, Tristan Sullivan

15:15

16:15

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

16:15–16:33

Can We Fill a 400 Gbps WAN?

Speaker
Jiri Chudoba

16:33–16:51

Distributed Performance Testing of High-Speed Scientific Networks in Preparation for Exabyte Scale Workflows

Speaker
Lael Verace

16:51–17:09

Investigating Routing Anomalies and Performance Degradation in WLCG Networks (Case Studies)

Speaker
Petya Vasileva

17:09–17:27

WLCG Mini-Capability Challenge: Host Tuning to Improve WAN Data Transfers

Speaker
Andrew Malone Melo

17:27–17:45
Entanglement Distribution with Quantum–White Rabbit Coexistence over Metropolitan Distances

Speakers
Marian Babik, Marian Babik

17:45–18:03 **Making WLCG Networks Visible: An Alarm and Visualization Platform**

Speaker
Petya Vasileva

18:03

16:15

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

16:15–16:33
SCOPE: A Sustainable Computing Prototype for the Einstein Telescope

Speaker
Stefan Krischer

16:33–16:51
How CERN openlab is supporting the experiments at the HL-LHC by unlocking new sustainable technologies through partnerships with industry

Speaker
Thomas Owen James

16:51–17:09
SRCNet Distributed Computing: Architecture, Progress, and Lessons Learned

Speakers
Rohini Joshi, Rohini Joshi

17:09–17:27
SPECTRUM: A Strategic Framework and Technical Blueprint for European Exascale Research Data and Compute Infrastructure

Speaker
Sergio Andreozzi

17:27–17:45
An Integrated Management System for Data Processing of the AliCPT Primordial Gravitational Wave Telescope

Speaker
Siqi Hou

17:45–18:03
CMS Tier-0 Performance in Run-3 under Increased Luminosity and Throughput

Speaker
Antonio Linares

18:03

Thursday 28 May

13:45

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

13:45–14:03 **Exabyte-Scale Automation, Alarms and Monitoring at CERN**

Speaker
Octavian-Mihai Matei

14:03–14:21 **Anomaly Detection in the LHCb Computing Infrastructure**

Speaker
Pierfrancesco Cifra

14:21–14:39 **Tag based Resource Monitoring for CMS Sites**

Speaker
Carlos Borrajo Gomez

14:39–14:57
JobLens: A Lightweight Job Observability Collector for High-Throughput HEP Computing

Speaker
Mr Zhenyuan Wang

14:57–15:15
Towards An Unified Electric Energy Monitoring for the Worldwide LHC Computing Grid

Speaker
Natalia Diana Szczepanek

15:15

16:15

Track 7 - Computing infrastructure and sustainability

Session | **Location:** Chulalongkorn University

16:15–16:33 **A Next Generation (Triggers) Computing Platform for HEP**

Speakers
Raulian-Ionut Chiorescu, Ricardo Rocha

16:33–16:51 **A Computing Cluster for Technology Tracking in Einstein Telescope.**

Speakers
Lia Lavezzi, Lia Lavezzi

16:51–17:09 **Upgrading the RO-03-UPB site to a Tier 1 facility in 2025-2026**

Speaker
Sergiu Weisz

17:09–17:27
Design and Cooling Strategy of the LHCb Data Acquisition System for Run 4

Speaker
Francesco Sborzacchi

17:27–17:45 **Offloading AI/ML inference as-a-service on “any” remote HPC center**

Speaker
Diego Ciangottini

17:45–18:03 **Digital Twin for Server Network Analysis with LLM-Driven RAG Integration**

Speaker
Mr Andrey Shevel

18:03