

Session Program

9-11 Mar 2021



CERN openlab Technical Workshop

Exascale technologies for AI, HPC and advanced storage solutions

Zoom

Tuesday 9 March

14:40

Exascale technologies for AI, HPC and advanced storage solutions: Unified programming models - Intel OneAPI

Session | Location: Zoom | Convener: Maria Girone

14:40-14:50 **Using oneAPI in ATLAS**

Speaker

Attila Krasznahorkay

14:50-15:00 **OneAPI for simulation: the AdePT project**

Speaker

Daniel-Florin Dosaru

15:00

15:05

Exascale technologies for AI, HPC and advanced storage solutions: Advanced storage solutions

Session | Location: Zoom

15:05-15:30 **DAOS: Nextgen Storage Stack for AI, Big Data and Exascale HPC**

Speaker

Johann Lombardi

15:30-15:40 **Exploring DAOS for HEP Data with ROOT RNTuple**

Speaker

Jakob Blomer

15:40

15:55

Exascale technologies for AI, HPC and advanced storage solutions: Heterogeneous architectures and HPC

Session | Location: Zoom | Convener: Maria Girone

15:55-16:05 **The Patatrack project**

Speakers

Andrea Bocci, Felice Pantaleo

16:05-16:15 **The Allen project**

Speaker

Roel Aaij

16:15-16:25

Towards a Modular SuperComputer Architecture at Exascale: DEEP-EST project

Speaker

Viktor Khristenko

16:25-16:35 **Benchmarking in HPC**

Speaker

David Southwick

16:35-16:45 **Profiling code on NVIDIA GPUs**

Speaker
Ingvild Brevik Hoegstoeyl

16:45-16:55 **Deep learning for the CMS experiment using the Micron DLA**

Speaker
Thomas Owen James

16:55-17:05

Using deep learning techniques on hardware accelerators for particle identification studies in ProtoDUNE

Speaker
Manuel Rodriguez

17:05-17:30 **Micron Deep Learning Accelerator, tools and applications**

Speakers
Dustin Werran, Eugenio Culurciello

17:30-17:40 **Q&A**

17:40

17:55

Exascale technologies for AI, HPC and advanced storage solutions: Data analytics and services

Session | **Location:** Zoom | **Convener:** Maria Girone

17:55-18:05 **EOS Productisation**

Speakers
Fabio Luchetti, Luca Mascetti

18:05-18:30 **CERN openlab projects with Oracle**

Speakers
Riccardo Castellotti, Viktor Kozlovsky

18:30-18:55 **Planet-Scale database and Blockchain for the masses (Talk by Oracle)**

Speaker
Wei Hu

19:00