

Session Program

17-21 May 2021

**25th International Conference on Computing
in High Energy & Nuclear Physics**

Accelerators

Tuesday 18 May

15:00

Accelerators: Tue PM

Session | Conveners: Simon George, Felice Pantaleo

15:00–15:13 **A Portable Implementation of RANLUX++**

Speaker

Jonas Hahnfeld

15:13–15:26

A Computing and Detector Simulation Framework for the HIBEAM/NNBAR Experimental Program at the ESS

Speaker

Bernhard Meirose

15:26–15:39

Performance of CUDA Unified Memory in CMS Heterogeneous Pixel Reconstruction

Speaker

Ka Hei Martin Kwok

15:39–15:52

Porting CMS Heterogeneous Pixel Reconstruction to Kokkos

Speaker

Matti Kortelainen

15:52–16:05

Heterogeneous techniques for rescaling energy deposits in the CMS Phase-2 endcap calorimeter

Speaker

Bruno Alves

16:05–16:18

Usage of GPUs in ALICE Online and Offline processing during LHC Run 3

Speaker

David Rohr

16:20

Wednesday 19 May

17:40

Accelerators: Wed PM

Session | **Conveners:** Stewart Martin-Haugh, Dorothea Vom Bruch

17:40-17:53

Integration of JUNO simulation framework with Opticks: GPU accelerated optical propagation via NVIDIA OptiX

Speaker

simon blyth

17:53-18:06

GPU simulation with Opticks: The future of optical simulations for LZ

Speaker

Oisín Creaner

18:06-18:19

MadFlow: towards the automation of Monte Carlo simulation on GPU for particle physics processes

Speaker

Dr Juan M. Cruz Martínez

18:19-18:32

Novel features and GPU performance analysis for EM particle transport in the Celeritas code

Speaker

Seth Johnson

18:32-18:45

Towards a cross-platform performance portability math kernel library in SYCL

Speaker

Vincent Pascuzzi

18:45-18:58

PandAna: A Python Analysis Framework for Scalable High Performance Computing in High Energy Physics

Speaker

Micah Groh

19:00