Session Program

July 28, 2024 to August 3, 2024

Lattice 2024

Software development and machines

Tue, July 30

1:45 PM

Software development and machines: TR7

Session | **Location:** University of Liverpool campus | **Convener:** Prof. Anthony Kennedy

1:45 – 2:05 PM **Lattice QCD on the NVIDIA Grace-Hopper architecture**

Speaker
Mathias Wagner

2:05 – 2:25 PM
Implementing automatic testing of Lattice QCD Software on Supercomputing Clusters

Speaker
Simon Bürger

2:25 – 2:45 PM **O(a)-improved QCD+QED Wilson Dirac operator on GPUs**

Speaker
Roman Gruber

2:45 – 3:05 PM **A Julia Code for Lattice QCD on GPUs**

Speaker
Fernando Pérez Panadero

3:05 – 3:25 PM **Rearchitecting QUDA for Multi-RHS Computation**

Speaker
Dr Kate Clark

3:25 – 3:45 PM **openQCD on GPU**

Speaker
Prof. Antonio Rago

3:45 PM

4:15 PM

Software development and machines: TR7

Session | **Location:** University of Liverpool campus | **Convener:** Kate Clark

4:15 – 4:35 PM
Autotuning multigrid parameters in the HMC on different architectures

Speaker
Bartosz Kostrzewa

4:35 – 4:55 PM
Multigrid Multilevel Monte Carlo for Efficient Trace Estimation in Lattice QCD Simulations

Speaker
Jose Jimenez-Merchan

4:55 – 5:15 PM
Deflation and polynomial preconditioning in the application of the overlap operator at nonzero chemical potential

5:15 PM

Speaker
Gustavo Ramirez-Hidalgo