Session Program

24–30 Jul 2016

The 34th International Symposium on Lattice Field Theory (Lattice 2016)

Algorithms and Machines

Highfield Campus, University of Southampton
Highfield Campus, Southampton SO17 1BJ, UK

Tuesday 26 July

16:30

Algorithms and Machines
Session | **Location:** Highfield Campus, University of Southampton, Building 67 Room 1007 | **Convener:** Dr Michael Endres

16:30–16:50 **Monte Carlo simulation of ϕ^4_2 and $O(N)\,\phi^4_3$ theories**

Speaker
Ms Barbara De Palma

16:50–17:10 **Monte Carlo methods in continuous time for lattice Hamiltonians**

Speaker
Ms Emilie Huffman

17:10–17:30 **Applications of Jarzynski's relation in lattice gauge theories**

Speaker
Mr Alessandro Nada

17:30–17:50 **Computing the density of states with the global Hybrid Monte Carlo**

Speaker
Dr Roberto Pellegrini

17:50–18:10 **Overcoming strong metastabilities with the LLR method**

Speaker
Prof. Biagio Lucini

18:10–18:30 **Metadynamics Remedies for Topological Freezing**

Speaker
Mr Francesco Sanfilippo

18:30

Wednesday 27 July

09:00

Algorithms and Machines

Session | **Location:** Highfield Campus, University of Southampton, Building 67 Room 1007 | **Convener:** Prof. Mike Peardon

09:00–09:20 **Domain decomposition and multilevel integration for fermions I**

Speaker
Stefan Schaefer

09:20–09:40 **Domain decomposition and multilevel integration for fermions II**

Speaker
Marco Cè

09:40–10:00 **The DDalphaAMG solver library**

Speaker
Dr Matthias Rottmann

10:00–10:20

Adaptive Aggregation-based Domain Decomposition Multigrid for Twisted Mass Fermions

Speaker
Mr Simone Bacchio

10:20–10:40

Domain Wall Fermion Simulations with the Exact One-Flavor Algorithm

Speaker
Mr David Murphy

10:40–11:00 **A simple method to optimize HMC performance**

Speaker
Mr Andrea Bussone

11:00

11:30

Algorithms and Machines

Session | **Location:** Highfield Campus, University of Southampton, Building 67 Room 1007 | **Convener:** Mr Guido Cossu

11:30–11:50

Optimization of the Domain Wall Dslash Kernel in Columbia Physics System

Speaker
Dr Meifeng Lin

11:50–12:10 **Algorithms for disconnected diagrams.**

Speaker
Mr Arjun Gambhir

12:10–12:30

A method to compute derivatives of functions of large complex matrices

12:30

Speaker
Mr Matthias Puhr

Thursday 28 July

14:00

Algorithms and Machines

Session | **Location:** Highfield Campus, University of Southampton, Building 67 Room 1007 | **Convener:** Prof. Tilo Wettig

14:00–14:20 **Introduction to the Quantum EXpressions (QEX) framework**

Speaker
Dr James Osborn

14:20–14:40 **Block Solver for multiple right hand sides on NVIDIA GPUs**

Speaker
Dr Mathias Wagner

14:40–15:00

Accelerating Lattice QCD Multigrid on GPUs Using Fine-grained Parallelization

Speaker
Dr Kate Clark

15:00–15:20 **Progress Report on Staggered Multigrid**

Speaker
Dr Evan Weinberg

15:20–15:40

A performance evaluation of CCS QCD Benchmark on Intel Xeon Phi (KNC) systems

Speaker
Dr Ken-Ichi Ishikawa

15:40–16:00 **MILC Staggered Conjugate Gradient Performance on Intel KNL**

Speaker
Dr Ruizi Li

16:00