



# Asia-Pacific Symposium for Lattice Field Theory (APLAT 2020)

## Tuesday, 4 August 2020

### Algorithms, machines, and code development: Session 4-1 A (14:00 - 15:40)

-Conveners: Issaku Kanamori

time	[id] title	presenter
14:00	[90] A better conditioned Domain Wall Operator	NEFF, Hartmut
14:20	[16] Multigrid methods for Chiral Fermions	BOYLE, Peter
14:40	[135] Multiple right-hand-side implementation for DD $\alpha$ AMG	YAMAMOTO (*), Shuhei
15:00	[6] Extending Bridge++ Lattice Simulation Code to Vector Processors	AOYAMA, Tatsumi
15:20	[83] Lattice QCD on QPACE 4	MEYER, Nils

### Algorithms, machines, and code development: Session 4-2 D (16:00 - 17:20)

-Conveners: Tilo Wettig

time	[id] title	presenter
16:00	[88] Supercomputer Fugaku and QCD Wide SIMD Library (QWS) on Fugaku	NAKAMURA, Yoshifumi
16:20	[56] Implementation of neighboring communication in QWS	KANAMORI, Issaku
16:40	[63] Using Xilinx Alveo accelerators for Lattice QCD	KORCYL, Piotr
17:00	[114] Field Selection Algorithm for Correlation Functions	SHICHENG (*), Xia

# Wednesday, 5 August 2020

## Algorithms, machines, and code development: Session 5-2 C (16:00 - 18:00)

-Conveners: Seyong Kim

time	[id] title	presenter
16:00	[35] Sign problem and the tempered Lefschetz thimble method	FUKUMA, Masafumi
16:20	[80] Application of the tempered Lefschetz thimble method to a chiral random matrix model	MATSUMOTO (*), Nobuyuki
16:40	[54] Bayesian Model Averaging	JAY (*), William
17:00	[8] Machine Learning and Histogram Reweighting: Detecting and Studying Phase Transitions	BACHTIS (*), Dimitrios
17:20	[60] Quantum Links for U(1) Gauge Theory on Qubits and Reduction to Z <sub>2</sub> Gauge Theory and Toric Code	KAWAI (*), Hiroki
17:40	[127] The applications of quantum computing techniques to lattice gauge theory and quantum noise mitigation	WANG (*), Xiaoyang