Agenda

Information Science & Technology Institute (ISTI)
Rapid Response "Hands-on Quantum Computing"
Research Presentations

September 26, 2018, 9 am – 12:15 pm

Location: Oppenheimer Study Center, Jemez/Cochiti Rooms

09:00 Introduction Rapid Response Hands-On Quantum Computing..... S. Eidenbenz
ISTI/NSEC

09:05 Efficient Fidelity Assessment for Quantum Computing .....M. Vuffray, A. Lokhov
T-4, T-5

09:20 Unraveling Entanglement in a Black Box Quantum Computer ..... D. Girolami
T-4

09:35 Leveraging Global Optimization Algorithms for Designing Quantum Operators .....H. Nagarajan
T-5

09:50 Quantum Optimization for Learning Unitary Operators .....A. Sornborger
CCS-3

10:05 Entanglement Spectroscopy on Gate-Level Quantum Computers..... W. Zhu
T-4

10:25 BREAK

10:35 Harnessing Analog Noise: A Hybrid Algorithm for Binary Quadratic Optimization with Uncertainty .....C. Coffrin
A-1

10:55 Hybrid Quantum Computing for Graph Partitioning and Community Detection ..... S. Mniszewski
CCS-3

11:10 Variational Quantum Eigensolver for H2O ..... P. Anisimov
AOT-AE

11:25 Lattice Nuclei and Response Functions with a Quantum Computer ...J. Carlson, E Mottola
T-2

11:40 Towards Solving Turbulence on Quantum Computers .....S. Karra
EES-16

11:55 Matrix Inversion..... M. Rogers, R. Singleton
XCP-8

12:10 Conclusion ..... S. Eidenbenz
NSEC

12:15 ADJOURN

Institutional Host: *Stephan Eidenbenz, ISTI, 505-500-2449, eidenben@lanl.gov*