

## Information Science & Technology Institute (ISTI) Rapid Response Quantum Programming Presentations

**December 13, 2017, 8:30 am – 12:15 pm**  
**Jemez/Cochiti Rooms, Study Center**

08:30	Welcome .....	Stephan Eidenbenz NSEC
08:35	Quantum Fourier Transform, Shor's Algorithm .....	Hristo Djidjev, Gopinath Chennupati CCS-3
08:55	Quantum Simulation.....	Petr Anisimov AOT-AE
09:10	Quantum Simulation (Transverse Quantum Ising Model).....	Lin Shizeng T-4
09:25	Quantum Approximate Optimization.....	Carleton Coffrin A-1
09:40	Quantum Tomography.....	Andrey Lkhov T-5
09:55	Break	
10:05	Quantum Principal Component Analysis.....	Patrick Coles T-4
10:20	Lloyd's Algorithm.....	Lakshman Prasad, Phil Romero ISR-3, HPC-ENV
10:35	Quantum Support Vector Machine.....	Boram Yoon CCS-7
10:55	Graph Properties in Adjacency List Model and Grover's Algorithm .....	Nathan Lemons T-5
11:10	Network Flows .....	John Ambrosiano, Randy Roberts A-1
11:25	Subset Sum.....	David Gunter, Toks Adedoyin CCS-7
11:40	Future Directions for Quantum Computing at LANL.....	John Sarrao ADTSC
12:00	Adjourn.....	

**Purpose:** Rapid Response Quantum Programming Presentations  
**Institutional Host:** Information Science & Technology Institute (ISTI)  
**Technical Host:** Stephan Eidenbenz, [eidenben@lanl.gov](mailto:eidenben@lanl.gov), 505-667-3742  
**Planner POC:** Nickole Aguilar Garcia; NSEC, 505-665-3048

LANL Update: 505-667-6622 or 1-877-723-4101: Provides information about changes in the Laboratory schedule (i.e., closings or delays) Protocol Office will adhere to all weather delays/closings.