## Quantum Computing Mini-Workshop

## **Report of Contributions**

Welcome

Contribution ID: 1 Type: not specified

#### Welcome

Wednesday 30 October 2019 09:00 (10 minutes)

**Presenters:** BAUER, Christian Walter (University of California Berkeley (US)); GRAY, Heather (LBNL)

Contribution ID: 2 Type: not specified

### Quantum sensing in ultra-clean optical lattices

Wednesday 30 October 2019 09:10 (30 minutes)

**Presenter:** MULLER, Holger

Contribution ID: 3 Type: not specified

# Particle tracking with annealers and quantum machine learning with Qulacs

Wednesday 30 October 2019 09:50 (30 minutes)

**Presenter:** SAWADA, Ryu (University of Tokyo (JP))

Contribution ID: 4 Type: **not specified** 

## **Quantum Testbed at Berkeley**

Wednesday 30 October 2019 11:00 (30 minutes)

Presenter: SANTIAGO, David

Contribution ID: 5 Type: **not specified** 

## Variational Quantum Classification with Qiskit and Developments in Particle Tracking with DWave

Wednesday 30 October 2019 11:40 (30 minutes)

**Presenter:** DRECHSLER, Eric (Simon Fraser University (CA))

Contribution ID: 6 Type: **not specified** 

#### Prospects for Discrete, Quantum, and 'Classical' Variational Autoencoders in analysis and synthetic data generation

Wednesday 30 October 2019 14:00 (30 minutes)

**Presenter:** FEDORKO, Wojtek (University of British Columbia)

Quantum Comp  $\,\cdots\,$  / Report of Contributions

Natalie Klco

Contribution ID: 7 Type: **not specified** 

#### **Natalie Klco**

Contribution ID: 8 Type: not specified

### LBNL Advanced Quantum Testbed Software Stack

Wednesday 30 October 2019 15:10 (25 minutes)

Presenter: IANCU, Costin (LBNL)

Contribution ID: 9 Type: **not specified** 

# Quantum Simulation: from analog protocols to digital quantum algorithms

Wednesday 30 October 2019 14:40 (25 minutes)

**Presenter:** METCALF, Mekena (LBNL)

Contribution ID: 10 Type: not specified

### **QAOA for Track Reconstruction**

Wednesday 30 October 2019 16:10 (15 minutes)

**Presenter:** ROHM, Eric (LBNL)

Contribution ID: 11 Type: not specified

## SU(2) Gauge Theory on Digital Quantum Computers

Wednesday 30 October 2019 16:30 (20 minutes)

**Presenter:** STRYKER, Jesse

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Dinner at Jupiter

Contribution ID: 12 Type: not specified

## **Dinner at Jupiter**

Wednesday 30 October 2019 19:00 (2 hours)