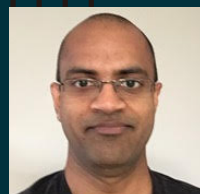# Computing Sciences Area
2021 POSTDOC SYMPOSIUM
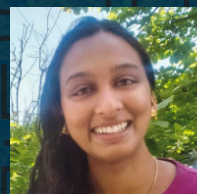
BERKELEY LAB

Thursday, February 11, 2021

Venkitesh Ayyar – 9:00am
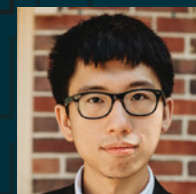Mapping the Universe Using Generative Adversarial Neural Networks

Alice Gatti – 9:30am
Deep Reinforcement Learning for Graph Partitioning

Aditi Krishnapriyan – 10:00am
Learning Continuous Models for Continuous Physics

Doru Thom Popovici – 10:30am
Improving Data Locality Across Fourier Transforms and Linear Algebra Operations

Qiao Kang – 11:00am
Improving All-to-Many Personalized Communication in Two-Phase I/O

Prashant Pandey – 1:00pm
Metagenomic Reads Classification Using Graph Neural Networks

Daan Camps – 1:30pm
Approximate Quantum Circuit Synthesis Using Block Encodings

Alexis Morvan – 2:00pm
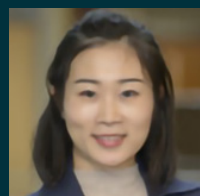Quantum Imaginary Time Evolution on the Advanced Quantum Testbed

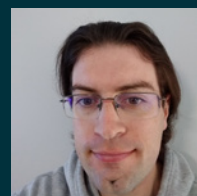**Miro Urbanek – 2:30pm**
Mitigating Noise on Quantum Computers

Oluwamayowa Amusat – 3:00pm
Data-Driven Models for Equation-Oriented Optimization

Friday, February 12, 2021

Zhi (Jackie) Yao – 9:00am
Exascale-Enabled Physical Modeling for Next-Generation Microelectronics

Oisin Creaner– 9:30am
Optical Photon Propagation Simulations for LZ Using GPUs

Neil Mehta – 10:00am
Determining Best Molecular Dynamics Potential for the Job

Jialun "Galen" Wang – 10:30am
Modeling Non-equilibrium Phase Transition in Complex Fluids

Oscar Antepara – 11:00am
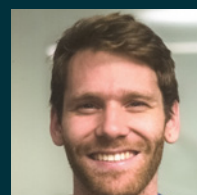Accurate Numerical Algorithm for Scientific Applications with Complex Geometries

Ishan Srivastava – 1:00pm
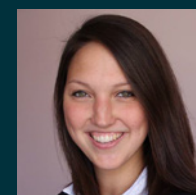A New Computational Approach for Modeling Nanoscale Electrokinetic Flows

Don Willcox – 1:30pm
Scalable Computational Modelling of Neutrino Quantum Kinetics in Astrophysics

Anne Felden – 2:00pm
An AMR Subglacial Hydrology Model – SUHMO

Jordi Wolfson-Pou – 2:30pm
Comparing the PFASST, MGRIT and Parareal Methods

Lisa Claus – 3:00pm
High-Performance Multifrontal Solver with Low-Rank Compression

https://lbnl.zoom.us/j/205038583