



HQI Quantum Fest

Thursday, December 15, 2022

Speaker	Talk Title
Session I – Jefferson 250 (9:00 AM – 12:10 PM)	
Anuva Aishwarya	Harnessing the power of correlated electrons in quantum materials using scanning tunneling microscopy
Luiz Pimenta Martins	High-pressure studies of atomically-thin van der Waals materials
Deepankur Thureja	Tunable quantum traps for excitons in 2D semiconductors
Kevin Nuckolls	Correlations, Topology, and Unconventional Superconductivity in Twisted Bilayer Graphene
Augusto Ghiotto (Virtual Talk)*	Correlated quantum phases in twisted WSe ₂
Hongyuan Li (Virtual Talk)*	Imaging Interacting Electrons in van der Waals Moiré Heterostructures
Session II – Jefferson 250 (2:00 PM – 5:15 PM)	
Xueyue (Sherry) Zhang	A scalable superconducting quantum architecture with long-range connectivity
Lysander Christakis	Microscopy of quantum correlations in an ultracold molecular gas
Andrei Ruskuc	Single Rare-Earth Ions in Solid-State Hosts: A Platform for Quantum Networks
Aurélien Fabre	Manipulating ultracold dysprosium atoms to study non-classical and topological states of matter
Yiqi Wang	Manipulating and Measuring States of an Optomechanical Resonator in the Quantum Regime
Raphael Holzinger	Cooperative Phenomena in Dipole-Coupled Quantum Emitters

***Please Register for talk:** <https://harvard.zoom.us/meeting/register/tJcqdeGsrz8iHtxEk4Fu-YSyx4HEEspNqP0e>



HQI Quantum Fest

Friday, December 16, 2022

Speaker	Talk Title
Session I - Jefferson 250 10:00 AM - 12:00 PM	
Shima Rajabali (Virtual Talk)*	From Quantum Optics to Quantum Communications
Peter Lunts	Scalable Hybrid Monte Carlo for Quantum Criticality in Metallic Systems
Yiming Chen	Transition between Black hole and a quantum gas of strings
Session II - Jefferson 250 1:00 PM - 3:00 PM	
Tommy Schuster	Many-body teleportation and error propagation via quantum information dynamics
Christain Kokail	Variational Quantum Algorithms and Entanglement Learning
Eric Anschuetz	Interpretable Quantum Advantage in Neural Sequence Learning
Ethan Lake	Renormalization group quantum circuits

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