

Physics

Session **T**

Room: 109 Jorgensen

1:00 - 1:20 PM	Alexander M. Recce	Optimization of patterned gold-assisted exfoliation for monolayer transition metal dichalcogenides	James Hone <i>Wang Fong-Jen Professor of Mechanical Engineering, Columbia University</i> Simon Yoon <i>Graduate Student in Mechanical Engineering, Columbia University</i> Keith C. Schwab <i>Professor of Applied Physics</i>
1:20 - 1:40 PM	Marcus N. King <i>Edward C. Stone Voyager SURF Fellow</i>	Characterizing thermohaline convection in polluted white dwarfs using 3D hydrodynamical simulations	James W. Fuller <i>Professor of Theoretical Astrophysics</i> Jose Rafael Fuentes <i>Postdoctoral Scholar Research Associate in Theoretical Astrophysics</i>
1:40 - 2:00 PM	Jonathan X. Hu <i>Nellie Bergen and Adrian Foster Tillotson SURF Fellow</i>	Characterization and optimization of Kinetic Inductance Phonon-Mediated (KIPM) detectors for low-threshold dark matter direct detection	Sunil Golwala <i>Professor of Physics</i>
2:00 - 2:20 PM	Olivia J. Xu	Studying the quantum kinetic evolution of neutrinos	Chad Kishimoto <i>Associate Professor of Physics and Biophysics, University of San Diego</i> Ryan B. Patterson <i>Professor of Physics</i>
2:20 - 2:30 PM	BREAK		
2:30 - 2:50 PM	John M. Sullivan <i>Robert L. Blinkenberg SURF Fellow</i>	Sub-cycle quantum control of Hubbard excitons in a Mott insulator	Matteo Mitrano <i>Assistant Professor of Physics, Harvard University</i> Nai-Chang Yeh <i>Thomas W. Hogan Professor of Physics</i>

2:50 - 3:10 PM	Shuhul Mujoo	Spectator-error-free two-qubit gates for fluxonium qubits using a dual-mode coupler	William D. Oliver <i>Professor of Physics, Massachusetts Institute of Technology</i> Miguel Moreira <i>Graduate Student in Engineering Quantum Systems, Massachusetts Institute of Technology</i> David Hsieh <i>Donald A. Glaser Professor of Physics</i>
3:10 - 3:30 PM	Samikshya Mahapatra <i>Hugh F. and Audy Lou Colvin SURF Fellow</i>	Development of a standalone scintillation detector kit for muon and gamma detection	Ryan B. Patterson <i>Professor of Physics</i>
3:30 - 3:50 PM	Ram Sivaraman <i>Samuel P. and Frances Krown SURF Fellow</i>	Modeling and design of scalable qubits through a novel semiclassical framework for nondispersive fluxonium readout	Gil Refael <i>Taylor W. Lawrence Professor of Theoretical Physics</i> Yinan Chen <i>Graduate Student in Physics</i> Nina del Ser <i>DFG Postdoctoral Scholar Fellowship Trainee in Theoretical Physics</i> Jacob Steiner <i>Postdoctoral Scholar Research Associate in Theoretical Physics</i>
3:50 - 4:10 PM	Kensuke Shimojo <i>Bill Davis SURF Fellow</i>	Experimental characterization and simulation of nanopore ion beams for single-molecule mass spectrometry	Michael L. Roukes <i>Frank J. Roshek Professor of Physics, Applied Physics, and Bioengineering</i>