2nd Joint Quantum Symposium
April 18 - 19, 2019
Columbia University
Davis Auditorium & Physics Theory Center

Organizers:
Sebastian Will, Javad Shabani, Martin Claassen

Day 1 - Thursday, April 18th - Davis Auditorium, Schapiro CEPSR 4th floor

Demo table: *Toptica*

8:00 am - 9:00 am	Check-In
9:00 am - 9:05 am	Opening Remarks (Sebastian Will & Javad Shabani)
9:05 am - 9:15 am	Opening Address (Peter de Menocal, Columbia Dean of Science)
9:15 am - 9:45 am	Charles Tahan (LPS) *Tomorrow's quantum computers won't be made with today's qubits*
9:45 am - 10:30 am	Alexander Gaeta (Columbia University) *Quantum photonics in the frequency domain*

Coffee Break (Atrium of CEPSR*)*

10:45 am - 11:30 am	Giuseppe Carleo (Flatiron Institute) *Advances in deep learning for quantum many-body physics*
11:30 am - 12:15 pm	Waseem Bakr (Princeton University) *Quantum gas microscopy of ultracold fermions in optical lattices*

Lunch (Atrium of CEPSR)

Demo table: *Quantum Design*

1:15 pm - 2:00 pm	Eden Figueroa (Stony Brook University) *Building a quantum repeater prototype connecting Stony Brook and Brookhaven*
2:00 pm - 2:45 pm	Tanya Zelevinsky (Columbia University) *Ultracold molecule clocks*

Coffee Break (Atrium of CEPSR)

3:00 pm - 3:20 pm	Sebastian Will (Columbia University) *Ultracold dipolar molecules for quantum simulation and quantum information*
3:20 pm - 3:45 pm	Javad Shabani (New York University) *Engineering topological superconductivity in epitaxial superconductor-semicoductor heterostructures*
3:45 pm - 4:30 pm	Michel Devoret (Yale University) *Catching and reversing a quantum jump*

Day 2 - Friday, April 19th - Davis Auditorium, Schapiro CEPSR 4th floor

Demo table: *Vescent Photonics*

9:00 am - 9:45 am   Dirk Englund (MIT)
                           Scalable quantum networks with artificial atoms

Coffee Break (Atrium of CEPSR)

10:00 am - 10:40 am   Nicholas Bronn (IBM Q)
                           NISQ-y business: Quantum computing's coming of age
10:40 am - 11:20 am   Thomas Alexander (IBM Q)
                           Qiskit: A framework for all of your NISQ needs
11:20 am - 11:30 am   QuTools demo by Quantum Design

Lunch (Pick up at Atrium of CEPSR, move to Physics Theory Center)

Relocate to Physics Theory Center, Pupin Hall 8th floor

12:45 pm - 1:30 pm   Jennifer Cano (Stony Brook University)
                           Topological quantum materials
1:30 pm - 2:15 pm   Aditi Mitra (New York University)
                           Non-equilibrium phases: Floquet topology and transient superconductivity
2:15 pm - 3:00 pm   Misha Lukin (Harvard University)
                           Exploring new frontiers of quantum science with atom arrays

Coffee Break (Physics Theory Center)

3:30 pm - 4:30pm   Panel Discussion: Future of Quantum Technology

                           Jerry Chow (IBM Q)
                           Misha Lukin (Harvard University)
                           Tom Marshall (Bloomberg)
                           John Prisco (Quantum Xchange)
                           Charles Tahan (LPS)
                           Host: Sebastian Will

Note:
Non-registered attendees are welcome to join for the talks if there is space. Please give registered attendees priority for seats, food and refreshments. Thank you very much!
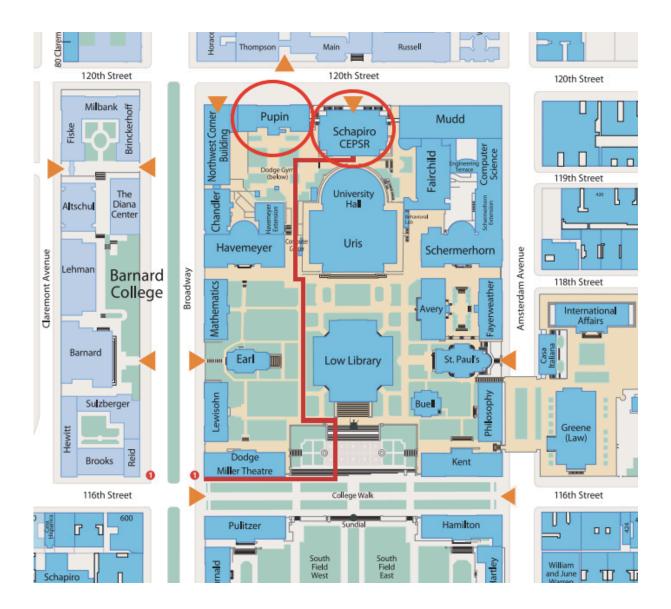
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Columbia University - Directions

Davis Auditorium (Schapiro CEPSR) and Physics Theory Center (Pupin Hall)