Overview: We would like to welcome you to the 1st annual Joint Quantum Symposium held at New York University. This is a joint effort between NYU, Columbia University and IBM to discuss materials, hardware, systems and software tools in quantum computing. The meeting is centered on new developments in quantum information technology and relations to other branches of science and engineering. This symposium is supported by QClub to build a research network among the younger generation of quantum researchers and to promote collaborations in New York area. We kindly ask all participants to register. If you have not already registered, please do so by sending an email to jointquantumsymposium@gmail.com. Registration is free.

Directions

Center for Quantum Phenomena, 726 Broadway, New York, NY, 10003

Organizers

Javad Shabani, New York University
Sebastian Will, Columbia University
Douglas McClure, IBM

Day 1: Thursday, April 5th, Room: 940
(Location: Room 940)
9:00 am –9:10 am Organizers, Opening and Introduction
9:10 am – 9:45 am Antonio Corcoles, IBM, Intro to Superconducting Qubits
9:45 am –10:00 am Coffee Break
10:00 am –10:40 am Sarah Sheldon, IBM, Quantum control and characterization in superconducting qubits
10:40 am –11:10 am Giuseppe Carleo, Flatiron Institute, Simulation Methods for Quantum Many-Body Systems

Lunch and Demo Fair by Oxford Instruments
(Location: Room 1067)
Christopher Wood, IBM: (Have Your Laptops Ready)
1:15 pm –2:00 pm Part I: Introduction to QISKit
2:00 pm –3:00 pm Part II: Hands-on Programming of a Quantum Computer
3:00 pm –3:15 pm Coffee Break
3:15 pm –4:00 pm Sebastian Will, Columbia University, Quantum Control of Ultracold Atoms and Molecules

Day 2: Friday, April 6th
(Location: Room 1067)
9:15 am –9:45 am Javad Shabani, NYU, New Materials, New Qubits: Topological Qubits and Gatemons
9:45 am –10:15 am Andy Kent, NYU, Magnetic Textures and Spin-Torque Switching for Topological Qubit Control
10:15 am –10:30 am Coffee Break
10:30 am –11:15 am Nick Bronn, IBM, Quantum Algorithms

Lunch and Demo Fair by Keysight
(Location: Room 1067)
1:30 pm –2 pm Francis Alexander, Brookhaven National Lab, Quantum Information Science at BNL: The Path Forward
2:00 pm –2:45pm Chris Monroe, University of Maryland/IonQ, Quantum Computing with Atoms
2:45 pm – 3:30pm Coffee Break and Posters

Panel: Future of Quantum Information
3:15 pm –4:30 pm, Room 871
Introduction by NYU Vice Provost, Paul Horn
Charles Tahan, Technical Director, Laboratory for Physical Sciences
David Mordecai, Courant, NYU
Valerie Feldmann, CEO, Palestrina Group
Jay Gambetta, Manager, IBM
Chris Monroe, University of Maryland/IonQ

Keithley Networking Reception, 10th Floor Area