

Joint Quantum Symposium

New York University

April 5 – April 6, 2018

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