

QEC Summer School Schedule

As of July 20 subject to change.

Week 3

QEC Decoding
Experimental QEC - Trapped Ions
Programming QEC Simulations

Time	Activity	Location/Room	Mon 18	Tue 19	Wed 20	Thr 21	Fri 22	Sat 23	Sun 24	
7:00AM - 8:55AM	Breakfast	Winter Palace/West Terrace	Breakfast @ Library and the Music Room (Rooms before Winter Palace)			Breakfast		Breakfast: 7:00AM - 9:30AM @ Winter Palace Social Event: Scavenger Hunt 10AM - 12PM Riverview Room Lunch: 12:00PM - 1:30PM @ Winter Palace Dinner: 6:00PM - 9:00PM @ Library and the Music Room (Rooms before Winter Palace)	Study/Off Breakfast: 7:00AM - 9:30AM @ Winter Palace Lunch: 12:00PM - 1:30PM @ Winter Palace Dinner: 6:00PM - 9:00PM @ Library and the Music Room (Rooms before Winter Palace)	
9:00AM - 10:30AM	Lecture I	New York	QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield	Programming QEC Simulations Andrew Cross, IBM Quantum	Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum	Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum	QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield			
10:30AM - 11:00AM	Morning Tea Break	Atrium Lobby	Morning Tea Break							
11:00AM - 12:30PM	Lecture II	New York	Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum	QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield	QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield	Programming QEC Simulations Andrew Cross, IBM Quantum	Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum			
12:30PM - 1:25PM	Lunch	Winter Palace/West Terrace	Lunch @ Library and the Music Room (Rooms before Winter Palace)			Lunch				
1:30PM - 2:00PM	Q&A Sessions	New York	Q&A Session QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield	Q&A Session Programming QEC Simulations Andrew Cross, IBM Quantum	Q&A Session Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum	Crazy Ideas Session	Q&A Session QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield			
2:00PM - 2:30PM		New York	Q&A Session Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum	Q&A Session QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield	Q&A Session QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield		Q&A Session Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum			
2:30PM - 4:30PM	Unstructured Time	N/A	Unstructured Time		Unstructured Time					
4:30PM - 5:00PM	Open Problems, Student Talks, Crazy Ideas	New York	Student Talks @ 4:00PM	Student Talks @ 4:00PM	Unstructured Time	Q&A Session Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum	Open Problems - Part II QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield			
5:00PM - 5:30PM			Felix Thomsen Friederike Butt Varun Seshadri Marco Ballarin Basudha Srivastava Mark Webster	Arthur Pesah Julian Ding David Scheer Georgia Nixon Ohad Lib Ross Shillito	Open Problems - Part I Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum	Q&A Session Programming QEC Simulations Andrew Cross, IBM Quantum	Open Problems - Part II Experimental QEC - Trapped Ions Ken Brown, Duke University Ciaran Ryan-Anderson, Quantinuum			
5:30PM - 6:00PM	Unstructured Time	N/A	Unstructured Time							
6:00PM - 6:55PM	Dinner	Winter Palace/West Terrace	Dinner	Dinner @ Winter Palace	Dinner	Social Event: Diversity Panel @ Mary Duke Ballroom (A)	Dinner			
7:00PM - 8:00PM	Guest Lectures/Social Time	New York	Guest Lecture Aleksander Kubica, AWS	Unstructured Time	Guest Lecture Michael Vasmer, Perimeter Institute	Dinner @ Winter Palace	Guest Lecture Leo DiCarlo, TU Delft			
8:00PM - 9:00PM	Social	Atrium Lobby	Speaker Social		Speaker Social	Unstructured Time	Speaker Social			

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Week 4										
LDPC Codes Experimental QEC - Superconducting Qubits Programming QEC Simulations										
Time	Activity	Location/Room	Mon	Tue	Wed	Thr	Fri	Sat	Sun	
			25	26	27	28	29	30	31	
7:00AM - 8:55AM	Breakfast	Winter Palace/West Terrace	Breakfast		Breakfast @ Winter Palace	Breakfast @ Winter Palace Lecture begins at 8:30AM Experimental QEC - Superconducting Qubits Maika Takita, IBM Quantum Antonio Córcoles, IBM Quantum <u>Andreas Wallraff, ETH Zurich</u>	Breakfast	Breakfast: 7:00AM - 9:30AM @ Winter Palace Lunch: 12:00PM - 1:30PM @ Winter Palace	Students Depart Breakfast: 7:00AM - 9:30AM	
9:00AM - 10:30AM	Lecture I	New York	LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft	Programming QEC Simulations Andrew Cross, IBM Quantum	Experimental QEC - Superconducting Qubits Maika Takita & Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich	<u>Andreas Wallraff, ETH Zurich</u>	LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft			
10:30AM - 11:00AM	Morning Tea Break	Atrium Lobby	Morning Tea Break			Lecture begins at 10:00AM Programming QEC Simulations Andrew Cross, IBM Quantum	Morning Tea Break			
11:00AM - 12:30PM	Lecture II	New York	Experimental QEC - Superconducting Qubits Maika Takita & Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich	LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft	LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft	Bus leaves at 11:45AM	Experimental QEC - Superconducting Qubits Maika Takita & Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich			
12:30PM - 1:25PM	Lunch	Winter Palace/West Terrace	Lunch		Lunch @ Winter Palace	Social Event: IBM Research BBQ & Lab Tour at IBM Yorktown	Lunch			
1:30PM - 2:00PM	Q&A Sessions	New York	Q&A Session LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft	Q&A Session Programming QEC Simulations Andrew Cross, IBM Quantum	Q&A Session Experimental QEC - Superconducting Qubits Maika Takita & Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich		Q&A Session LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft			
2:00PM - 2:30PM		New York	Q&A Session Experimental QEC - Superconducting Qubits Maika Takita & Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich	Q&A Session LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft	Q&A Session LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft		Q&A Session Experimental QEC - Superconducting Qubits Maika Takita & Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich			
2:30PM - 4:30PM	Unstructured Time	N/A New York	Unstructured Time				Unstructured Time			Unstructured Time
4:30PM - 5:00PM	Open Problems, Student Talks, Crazy Ideas	New York	Student Talks @ 4:00PM Matt McEwen Joshua Ramette Neema Badihian Arkin Tikku Harriet Apel Paul Herringer	Student Talks @ 4:00PM Nathan Lacroix Zohar Schwartzman-Nowik Daniel Solis Boris Varbanov Alex Townsend-Teague	Open Problems - Part I Experimental QEC - Superconducting Qubits Maika Takita & Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich		Open Problems - Part II LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft			
5:00PM - 5:30PM					Open Problems - Part I LDPC Codes Nikolas Breuckmann, UCL Nicolas Delfosse, Microsoft		Open Problems - Part II Experimental QEC - Superconducting Qubits Maika Takita & Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich			
5:30PM - 6:00PM	Unstructured Time	N/A	Unstructured Time							
6:00PM - 6:55PM	Dinner	Winter Palace/West Terrace	Dinner			Dinner @ Winter Palace	Dinner @ Winter Palace	Team Building: 6:00PM - 7:30PM @ West Terrace		Closing Dinner & Keynote Speaker Sergey Bravyi, IBM Quantum @ Carriage House
7:00PM - 8:00PM	Guest Lectures/Social Time	New York	Guest Lecture Anirudh Krishna, Stanford University	Unstructured Time	Guest Lecture, Ted Yoder, IBM Quantum	Unstructured Time	Dinner: 7:30PM - 9:00PM @Winter Palace			
8:00PM - 9:00PM	Social	Atrium Lobby	Speaker Social		Speaker Social					