

QEC Summer School Schedule

As of July 18 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 New York | Unstructured Time | | Unstructured Time | | | | |
| 4:30PM - 5:00PM | Open Problems, Student Talks, Crazy Ideas | New York | Student Talks @ 4:00PM Felix Thomsen Friederike Butt Varun Seshadri Marco Ballarin Basudha Srivastava Mark Webster | Student Talks @ 4:00PM 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 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 | | | Open Problems - Part I QEC Decoding Christopher Chubb, ETH Zurich Earl Campbell, Riverlane & University of Sheffield | | 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 Andreas Wallraff, ETH Zurich | 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 | Experimental QEC - Superconducting Qubits Maika Takita, IBM Quantum Antonio Córcoles, IBM Quantum Andreas Wallraff, ETH Zurich | 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 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 Armanda Quintavalle 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 | | | | |