Event Schedule

https://sites.google.com/view/qhack-newsletter1-eng/home

Day 1 February 16

(9:30-) Opening Remarks & Orientation

(10:00-10:30) Installation of Qiskit
(10:30-11:30) Quantum Computing with Qiskit 1

(12:30-13:30) Quantum Computing with Qiskit 2

(14:00-15:00) Recent Quantum Research Trends

(15:30-16:00) Project Pitching 1

(16:30-17:00)Team Formation 1

Day 2 February 17

(9:00-12:00)
Introduction to Quantum Computing

Quantum Machine Learning

Introduction to Superconducting Qubits

Qiskit Metal Introduction & Demonstration

(13:00-14:00)
Project Pitching 2

(14:00-15:00)
Team Formation 2

Day 3 February 18

(9:00-17:00)
Hackathon Begins

All participants can work in breakout rooms with team members during the hackathon

Day 4 February 19

(9:00-14:00)
Hackathon

(15:00-16:30)

Final Team Presentations
(3min per team)

(16:30-17:00)
Judging

(17:00-17:30)
Awards Ceremony

What is a Hackathon?

"An event where people meet to engage in collaborative computer programming to demonstrate new ideas or create proof-of-concepts"

Qiskit Camp Asia 2019

Project Examples

1st Place Winners
Design a Pulse Programming Language
Expanding OpenPulse to the QASM simulator

2nd Place Winners
Quantum Imaging Processing (a case study: cities at night)
Using Quantum Computers to match images

Community Choice Winners
New Classical Optimizer for VQE of Aqua
Implementing a new method to determine expectation values in VQE

Honorable Mention, Best Presentation
Quantum Duel
Be the fastest draw in the Quantum West

Forming teams and hacking together

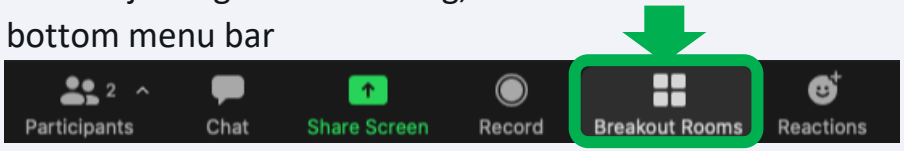
Qiskit

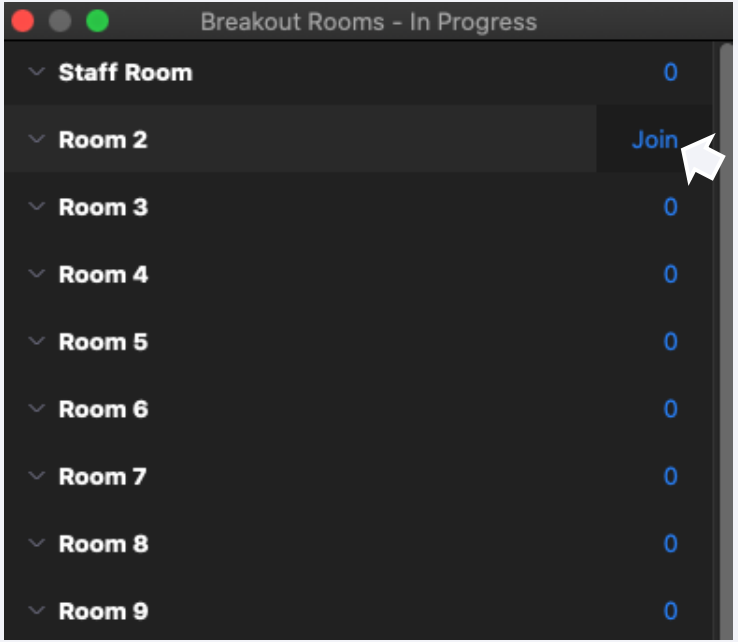
1. Go to the [qiskit-hackathon-korea-21](#) on qiskit-community GitHub
2. Browse issues (=projects) that are labeled “mer members wanted
3. **Leave a comment** if you are interested in joining
4. If you have a project topic of your own, feel free to **open an issue using the template**
5. **Pitch your project** during the Project Piching Time 1(today at 15:30) or Time 2(tomorrow at 13:00)
6. Once you have three members, your group is ready you can have up to **seven members max**
7. Meet your team members at 9am Thursday in Zoom Breakout room to start hacking together

Okay, my team is ready! Now what shall I do to work with them?

Collaborating in Breakout Rooms

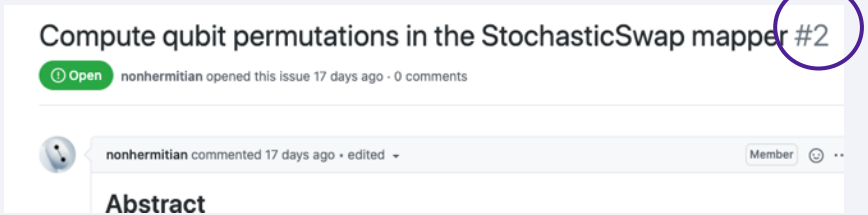
1. After joining Zoom meeting, click on Breakout Rooms in the bottom menu bar





2. Join the room number that corresponds to your project

3. The number should be the same as the number you see beside your project title in GitHub. (e.g. #2)



4. Organizers may broadcast messages to all rooms when we need your attention

5. Make sure you follow Qiskit Code of Conduct and be respectful to each other.

Moderators in the main room or Staff Room will assist you in case you do not know which room to go to so feel free to ask questions when in doubt

Have a project idea?

Qiskit

Join the Project Pitchers Time to pitch your project idea and gather members to form a team! For those who are undecided on which project to join, this will also be an excellent opportunity to get a better understanding on the different projects.

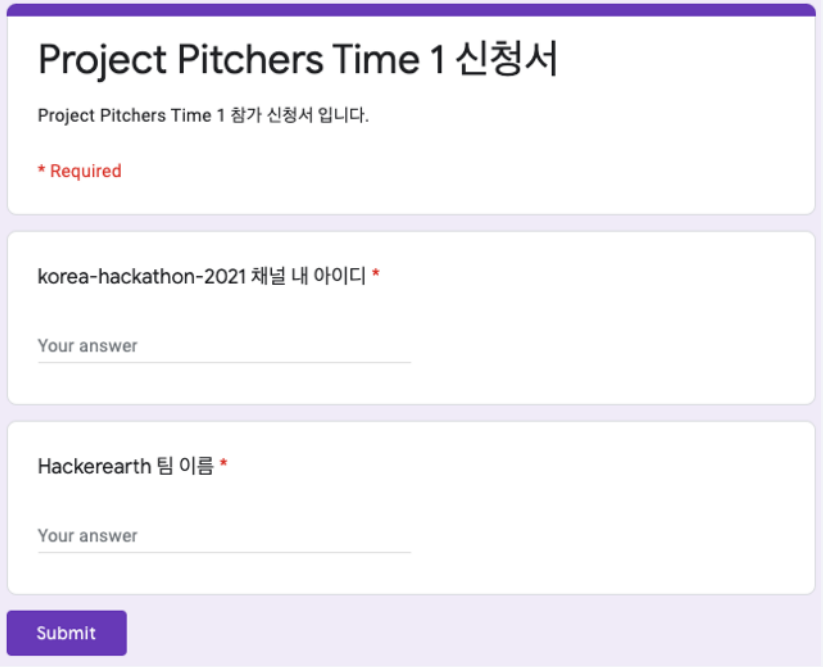
Project Pitchers' Time 1

Feb 16, 15:30 – 16:00

Project Pitchers' Time 2

Feb 17, 13:00 – 14:00

You can pitch a project too!



https://forms.gle/ocX9mFUrp1y8wdRM9

Judging Criteria

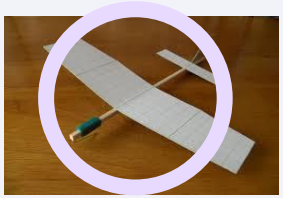
Qiskit

Originality and Uniqueness (25%)	Usefulness and Complexity (25%)	Quantum Community Benefit (25%)	Digital Presentation (25%)

Tips for a succesful hackathon

Qiskit

Note that you have less than 24 hours. Aim for a **Minimum Viable Product (MVP)**. Don't set unrealistic goals.

Start drafting the final presentation early. Examples of what your presentation should include:

- What the project is about and why this is a topic of interest (Wht is the significance of your project?)
- Approach (basis theory, algorithm or technique used to demonstrate idea or solve the problem)
- Results (Code with explanation, visual demonstration, etc. Try to show your results in a compelling way)
- Future Work (Improvements, enhancements for the future)

Define roles and responsibility and assign team members to work collaboratively

- Physicist in team -> Draft and articulate the concept in presentation
- CS major -> focus on coding and implementation
- Others -> Take notes, define action items, project and time management, etc.

Final Presentation to be presented in English

What we just covered

Qiskit

What is a Hackathon?

Past Hackthon Topic Examples

How to form a team (Choose an issue/topic and leave a comment in GitHub)

How to join Breakout Rooms to collaborate with team members

Project Pitchers Time

Tips for a successful hackathon

Any Questions?