Qiskit Hackathon
at World of Quantum

June 27-28

Attendee Guide

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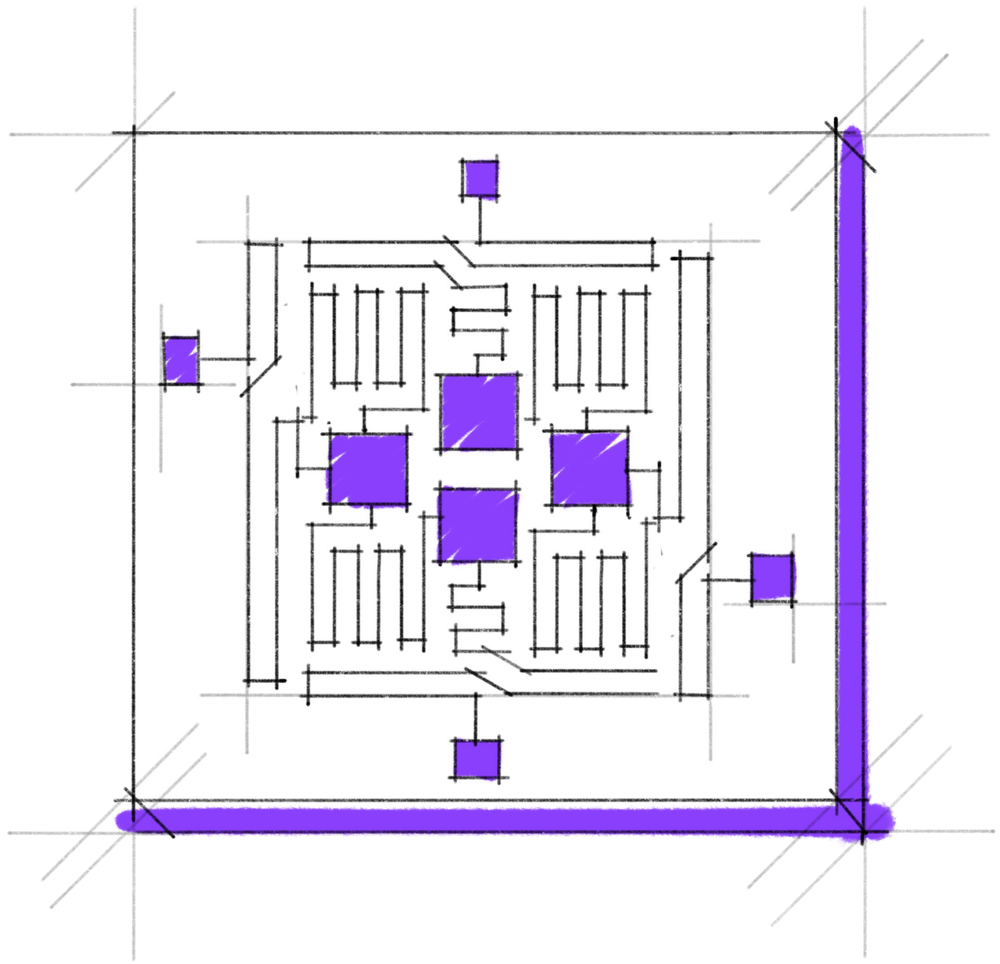


About

Welcome to Qiskit Hackathon at World of QUANTUM!

We are excited to welcome you to our second hackathon in Germany and to see what amazing projects you create.

Please read through this Attendee Guide to find answers about the structure, setup, agenda, and resources for the hackathon. A more detailed version that includes the challenge information will be shared at the event.

We'll see you at the Qiskit Hackathon at World of QUANTUM!

Index

Schedule

Pre-Event

Introduction to Quantum Computing with Qiskit [*Watch replay*]

27 June

Tuesday

11:00 – 11:20	Welcome Note on main stage at World of QUANTUM
11:30 – 13:30	Lunch, team formation and guidelines in the hackathon space
13:30	Start of the Hacking Phase in the Hackathon Space
18:30	Dinner
24:00	Midnight Snack

Snacks, drinks, and coffee will be available throughout the entire hackathon

Between 20:00 (27 June) and 08:00 (28 June) you may ask questions in the Qiskit Slack Channel #woq23-hackathon-support for remote assistance. *[Click here to join Qiskit Slack, if needed.]*

28 June

Wednesday

08:00	Breakfast
12:00	Lunch
13:30	End of the Hacking Phase and start of the Judging Phase
15:00 – 16:25	*Optional* Presentations in the hackathon space
16:30 – 17:00	Closing Ceremony on main stage at World of QUANTUM

Note: Time zone is CET

Code of Conduct

The Qiskit Hackathon at World of QUANTUM is committed to maintaining the highest level of enjoyment, accessibility, and inclusivity by maintaining an environment of respect, empathy, and compassion for others. In order to support that, we ask that each attendee review the **Qiskit Community Code of Conduct** before the event, and be familiar with our community standards to join us in maintaining a safe and welcoming event for all.

Useful Information

What to bring

We recommend bringing the below to make the most of your hackathon experience:

- Laptop with charger
- Phone charger
- Germany electric adapter *if needed*
- Notebook and pen
- Comfortable clothing
    - Jumper/jacket as fair halls can be slightly cold
- Re-usable water bottle

Food and beverage

- Food and beverages will be provided by the organizers throughout the hackathon.
- Please refer to the Schedule on page 03 for expected mealtimes.
- Food restrictions have been taken into account, but we recommend you bring your own food items if you are concerned about the available offerings.

Staying overnight

- Hackathon attendees are welcome to stay overnight in the hackathon space if desired.
    - If you plan on staying overnight, we recommend you plan accordingly with any items you might need such as blankets, pillows, sleeping bag and personal toiletries.
- Your hackathon ticket also allows you to leave and enter the venue throughout the night if needed.
- A security guard will be monitoring the space throughout the night.

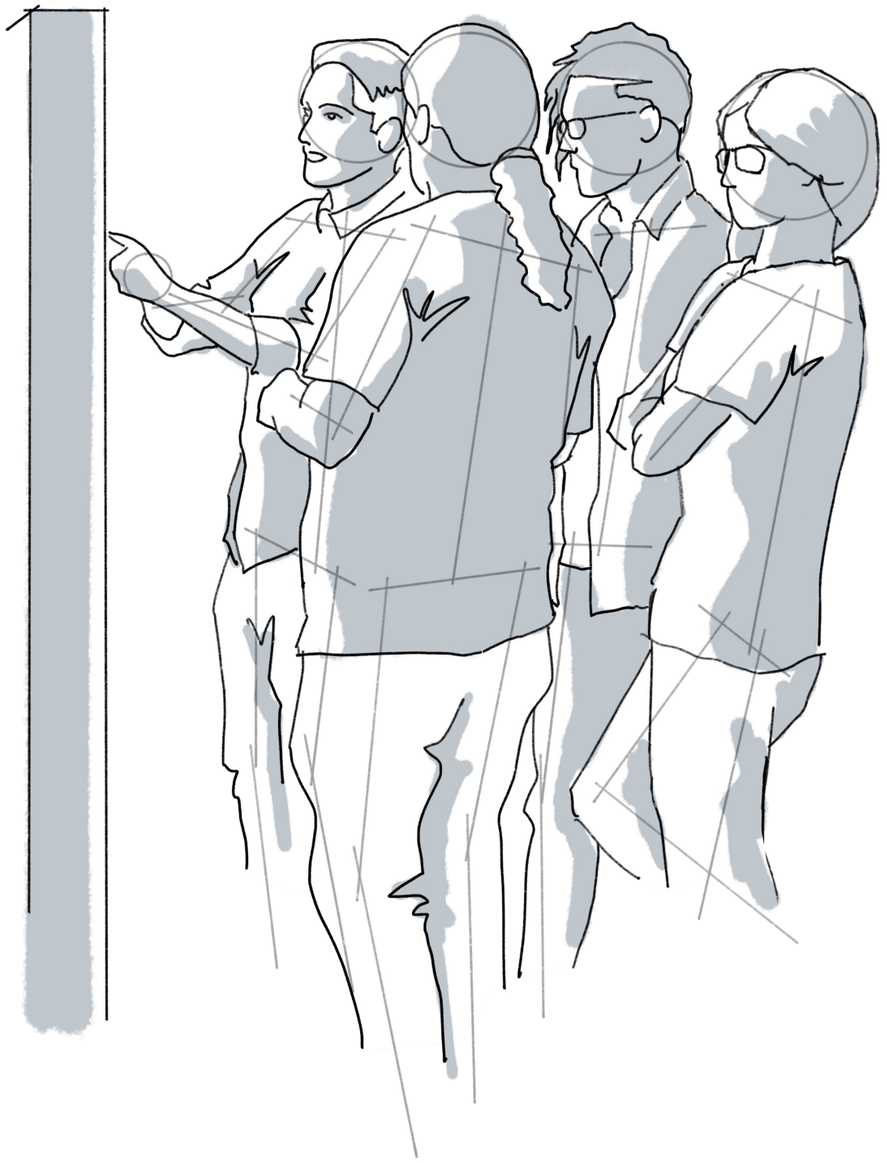
Team Formation

Team Formation

Once you've reviewed the challenge format, you should connect with other attendees to form a group!

Group up in teams of a minimum of 4 or maximum of 6 members.

If you are interested in a topic based on the challenge format, **write it on one of the boards** so that others can join your team. Interested in joining a team? Check out the topics on the boards and **add your name on a post-it note**.



Roles

To make it easier for you to organize your team, we have listed some roles which might be distributed among the team. This is a suggestion & is not required to be used.

Of course, it's still fundamental to discuss, brainstorm, and help the rest of the team, even if you use these roles.

Lector

Rewrites text to be easier to understand and better to follow

Mathematician

Comes up with formulas and theories.

Planner

Brings everything together, plans & has an overview of the lecture

Scientific Visualization

Makes illustrations/ animations to help understand the idea and the improvements

Coder

Writes efficient Qiskit code implementing the theory

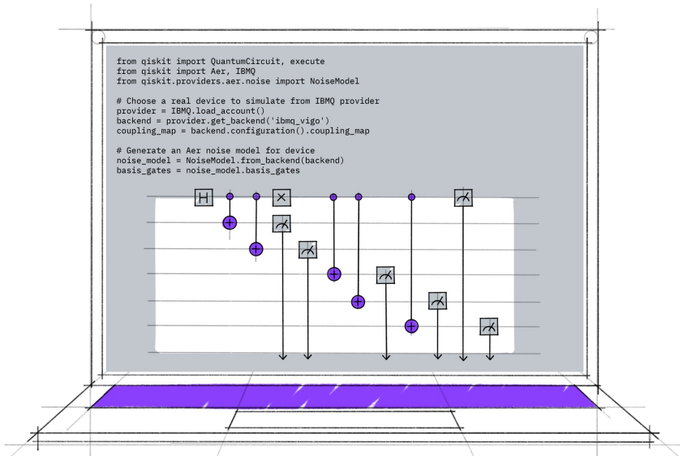
Project Submission

This is what you are required to submit in order to be eligible for the judging phase.

Jupyter Notebook

To make it easy for the judges we request you to submit a single Jupyter Notebook on a GitHub page containing all the content you want to be judged.

Exact components that need to be included in the notebook will be shared at the event.



Note: Your Jupyter Notebook must use Qiskit.

Teams can do an **optional** presentation to be eligible for a **Community Choice Award**.

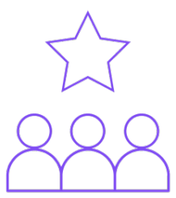
Presentations will occur at 15:00 on 28 June and should be a maximum of 3 minutes/3 slides.

Awards and Prizes

First Place Winning Team

1st Place Plaque
2500€ for Team
Exclusive Quantum Swag

Selected by team of Judges



Community Choice Award

Qiskit Mug
Exclusive Stickers

Participants will choose a team based on an *optional* presentation

Active Participants

Quantum Swag

To recognize your hard work in the Hackathon

Meet your Mentors!

Mentors will be available throughout the Hackathon to provide guidance and assist with any questions

Marcel Pfaffhausser

Quantum Community

Elisa Bäumer

Quantum Community

Fabio Scafirimuto

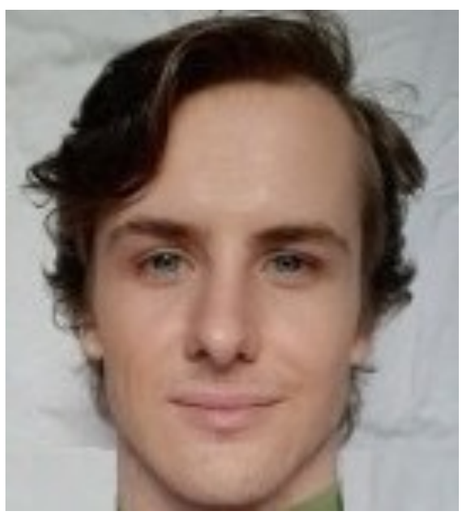
Quantum Community

Manuel Wirth

Quantum Community

Eddybrando Vásquez

Quantum Community



Floyd Creevey

Quantum Community

***James Weaver**

Quantum Community

***Sophy Shin**

Quantum Community

** These mentors will be available via slack #woq23-hackathon-support for the overnight hours to support you as needed.*

Resources

The Necessities

Install these software packages before the event:

- Python 3.7 or later
- Jupyter notebook
- Qiskit
- Suggested Tool: Anaconda

For installing Qiskit, you can follow the instructions provided here or watch a video here.

Qiskit Resources

Top Qiskit resources for you to review:

- Contributing to Qiskit *(required for code contributions!)*
- Qiskit tutorials
- Qiskit textbook
- Qiskit.org
- IBM Quantum Challenge Spring 2023

Map of the Venue

Status: 05/2023

1. Forum World of QUANTUM
2. Forum Quantum Science & Industry
3. Qiskit Hackathon @ World of QUANTUM
4. Forum Lasers and Optics
5. Forum Biophotonics and Medical Applications
6. Forum Laser Materials Processing
7. Special Show: Photons in Production
8. Career Center & Job Board
9. Start-up Arena
10. career now
11. Vision Expert Huddles

LASER World of PHOTONICS — 50 YEARS OF LASER

- A2 Lasers and optoelectronics, integrated photonics, optical information and communication
- A3 Lasers and laser systems for production engineering, sensors, test and measurement, optical measurement systems, imaging
- B1 Optics, manufacturing technology for optics
- B2 Lasers and optoelectronics, biophotonics and medical engineering
- B3 Lasers and laser systems for production engineering

ICM B0 WORLD OF PHOTONICS CONGRESS

WORLD OF QUANTUM

- A1 Laser systems, subsystems and components for quantum technology, quantum computing and simulation, quantum communication and cryptography, quantum sensing & imaging

automatica

- B6 Industrial robots, drive technology, control systems technology and industrial communications, software and cloud computing
- B5 Machine vision, sensor technology, supply technology, industrial robots
- B4 Industrial robots (incl. collaborative, mobile), professional service robotics, Start-up Arena, career now
- A6 Assembly and handling technology
- A5 Assembly and handling technology, positioning systems
- A4 Machine vision, safety and security technology, supply technology, industrial robots (incl. collaborative, mobile), professional service robotics

Stay connected!

Join the Qiskit Slack Community & the dedicated event channel #woq23-hackathon-support

Follow us on Twitter

If you have any questions, please reach **ask the mentors in-person** or **post in the** #woq23-hackathon-support Slack channel.