



RIPE NCC
RIPE NETWORK COORDINATION CENTRE

Quantum Internet Hackathon Intro Webinar

RIPE NCC Hackathons

Vesna Manojlovic (NCC) - BECHA@ripe.net
Guy Meyer (NCC) - gmeyer@ripe.net
Liza Darwash (SURF) - Liza.darwesh@surf.nl

Starting with gratitude



- Big thanks to:
 - all the organisers from all five nodes! Amsterdam (NL), Sarajevo (BH), Dublin (IE), Padua (IT), Poznan (PL)
 - organisers: RIPE NCC staff, SURF, QuTech, GEANT, PSNC, QIA, QNE...
- ... and of course ALL OF YOU: THE PARTICIPANTS!!!
- and to your families who are giving you support to prepare, work, travel & recover :)



What is a Hackathon?



- Hack-a-thon = hacking marathon

hacker: n.

[originally, someone who makes furniture with an axe]

1. A person who enjoys exploring the details of programmable systems and how to stretch their capabilities, as opposed to most users, who prefer to learn only the minimum necessary. RFC1392, the *Internet Users' Glossary*, usefully amplifies this as: A person who delights in having an intimate understanding of the internal workings of a system, computers and computer networks in particular.

- “Ours” are different from the “usual”; we are:
 - Producing & using FLOSS (free/libre open source software)
 - Cooperative, collaborative, non-competitive
 - Non-commercial: no monetary rewards

General Goals for the Hackathons



- Bring together network operators, students, researchers, designers, coders, hackers...
- Combine creative skills
- Get feedback
- Contribute useful tools for the community
- Make new connections
- Have fun!
- Documentation: labs.ripe.net/hackathons
- All [code on GitHub](#)

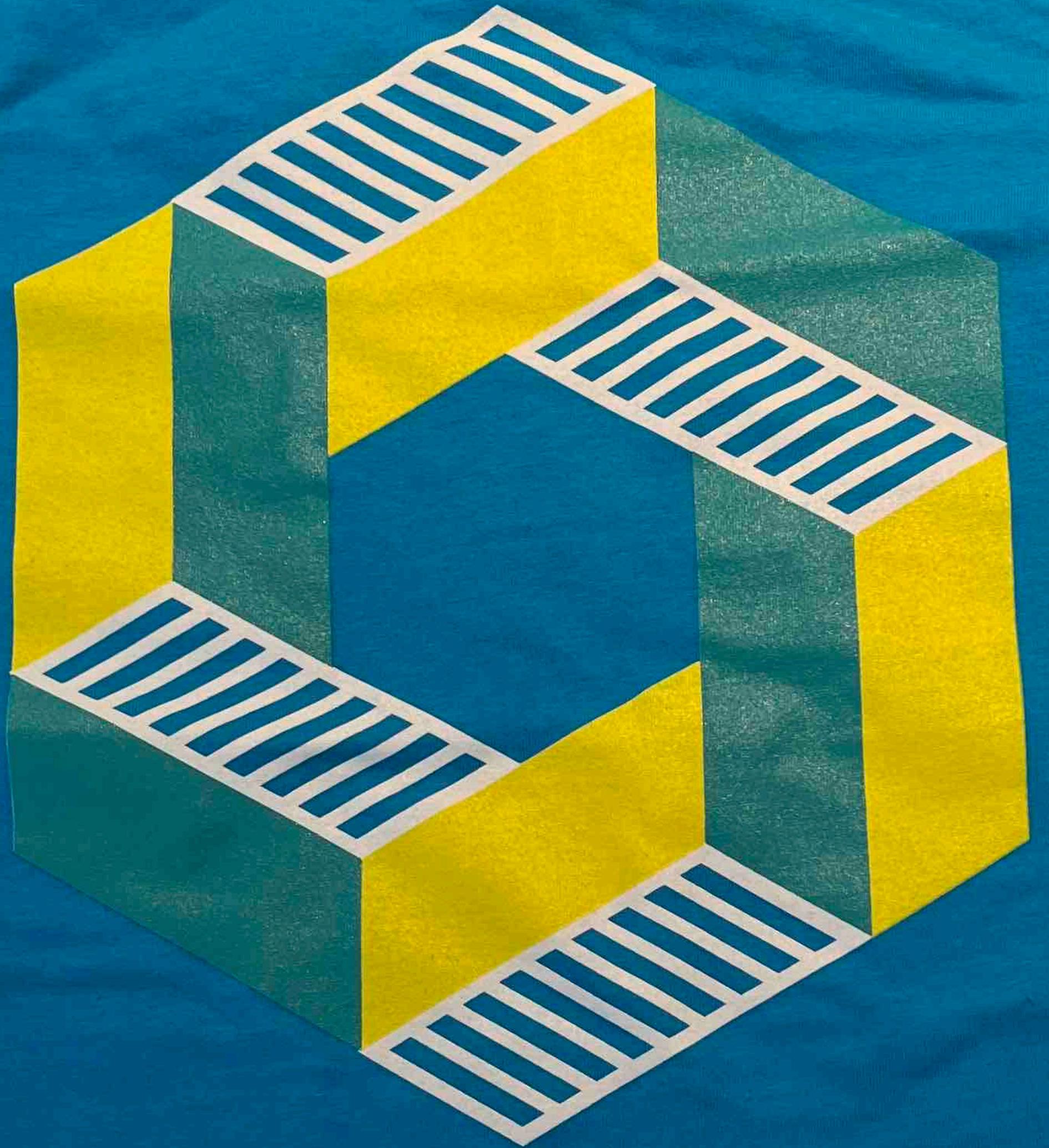
Cooperation, not Competition!



- We will showcase and celebrate all achievements during the closing session
- Several projects will be awarded symbolic prizes, in the categories of
 - Most Innovative Solution
 - Best Team Work
 - Most Complete Presentation
- Results will be promoted at next events

QiiH

Quantum Internet
Hackathon 2022





- 1-2 December 2022

Goals

- Sharing existing software and protocols for the Quantum Internet
- Producing tools & documentation, or learning/interaction materials
- Forging connections between participants and between nodes



Quantum Internet Hackathon Logistics

Disclaimer: all times are in CET (UTC+01:00)

(Noon in Amsterdam = 5:00 am in Chicago)

Logistics - Agenda, Day One



- 8:30 Welcome, coffee, tea
- 9:00 Hackathon begins
 - People introductions; Challenges / projects are introduced / T-shirts!
- 10:00 - 10:30 VIDEO LINK: Official GLOBAL kick-off
 - 10:30 – 11:00 tea break & mingling; teams are formed
- 11:00-13:00 Working on projects
- 13:00-14:00 Lunch (Amsterdam -> 12!)
- 14:00-17:30 Working on projects
- 17:30 - 18:00 VIDEO LINK: Update on one chosen project per node

- Amsterdam: 19:00 – 21:00 Dinner + T-shirts
- *18:00 -> (optional) Further work on projects*

Logistics - Agenda, Day Two



- 09:00-13:00 Working on projects
- 13:00-14:00 Lunch
- 14:00-15:00 FINISHING Work on projects (preparing presentations)
- 15:00-15:30 preparing the room for the final presentations; tea break
- 15:30 - 16:00 LOCAL Team presentations
 - & Jurors in each node pick one project to share
- 16:15-16:45 VIDEO LINK: The chosen projects from each node presented to all
 - 16:45 - 17:00 Giving praise & feedback to teams, thanks, and next steps!
- 17:00 Winding down & Cleaning Up &
 - -> Party! (Optional)
 - -> Drinks (Amsterdam, across the street!)

Logistics - food & drinks - Amsterdam



- Venue: VolksHotel, Wibautstraat 150
- All day in the room:
 - Snacks, tea/coffee, soft-drinks
- Lunch = Sandwiches, Soup, Salad
- Dinner on Thursday: 7PM -> Same venue, top floor
- Drinks on Friday: 5:30-ish PM -> across the street!

Content - Communication



- Global:
 - Slack: https://join.slack.com/t/quantumintern-wig3176/shared_invite/zt-1jvupxck6-b~EvFGJTdq~Oj5mGDL3O0A
 - Plus local channels
 - GitHub: <https://github.com/Lizaterdag/QIH-2022/>
 - Zoom Video Link:
- Locally:
 - WiFi: network name & password
 - Host's phone number in case of emergencies



What is Quantum Internet?

Liza Darwesh
Quantum Computing Advisor at SURF



Quantum Internet Hackathon Content

Content - Documents Store - GitHub!



- <https://github.com/Lizaterdag/QIH-2022/>
 - Lists of participants
 - global & per node
 - How Hackathons Work
 - Webinar Slides & Recording
 - Technical Details
 - Challenges

Content - Practical Goals and Process



- Goal: working prototype for your project
- Form teams of 3-6 people
 - take one of the available desks
 - plan your work on the project; consider available time!
 - divide the tasks into modules that can be parallelised
- Review/standup: Thursday 17:30PM CET
- Upload code to GitHub (or other public repo)
- Prepare final presentation / demo
 - no longer than 5 minutes!

Team Work



- Choose interdisciplinary team members
- Choose a **name** for the team and/or project
- Choose one (or more) spokesperson(s)
 - for the standup / review, for the final presentation
- Keep our space clean!
 - combining food, drinks & hacking is at own risk :)



Best Behaviour

- Cooperation & Team-Work
 - form the team of most diverse people possible
 - get to know each other; be constructive; cooperate
 - the goal is to contribute, not to compete nor to win
- Code of Conduct
 - be tolerant & respectful; encourage exchange of ideas
 - do NOT be demeaning, intimidating or harming
 - if you feel threatened, hurt or offended, speak to organisers
 - respect wishes for privacy while taking photos (**GDPR!**)



Quantum Internet Hackathon Continuity

Continuity is Crucial



- Paradox: Most hackathon work is done **outside** hackathons!
 - Results will be published on GitHub, to make it available for the community
 - Previous hackathon results are also on GitHub
 - in 2023 there will be more hackathons & other events
- In the meantime
 - You can subscribe to the mailing list: hackathon-list@lists.ripe.net
 - You can contribute further code improvements on [GitHub](#)
 - You can keep informed on RIPE Labs: labs.ripe.net/hackathons / [Calendar](#)
- Join us at other events

Upcoming Events

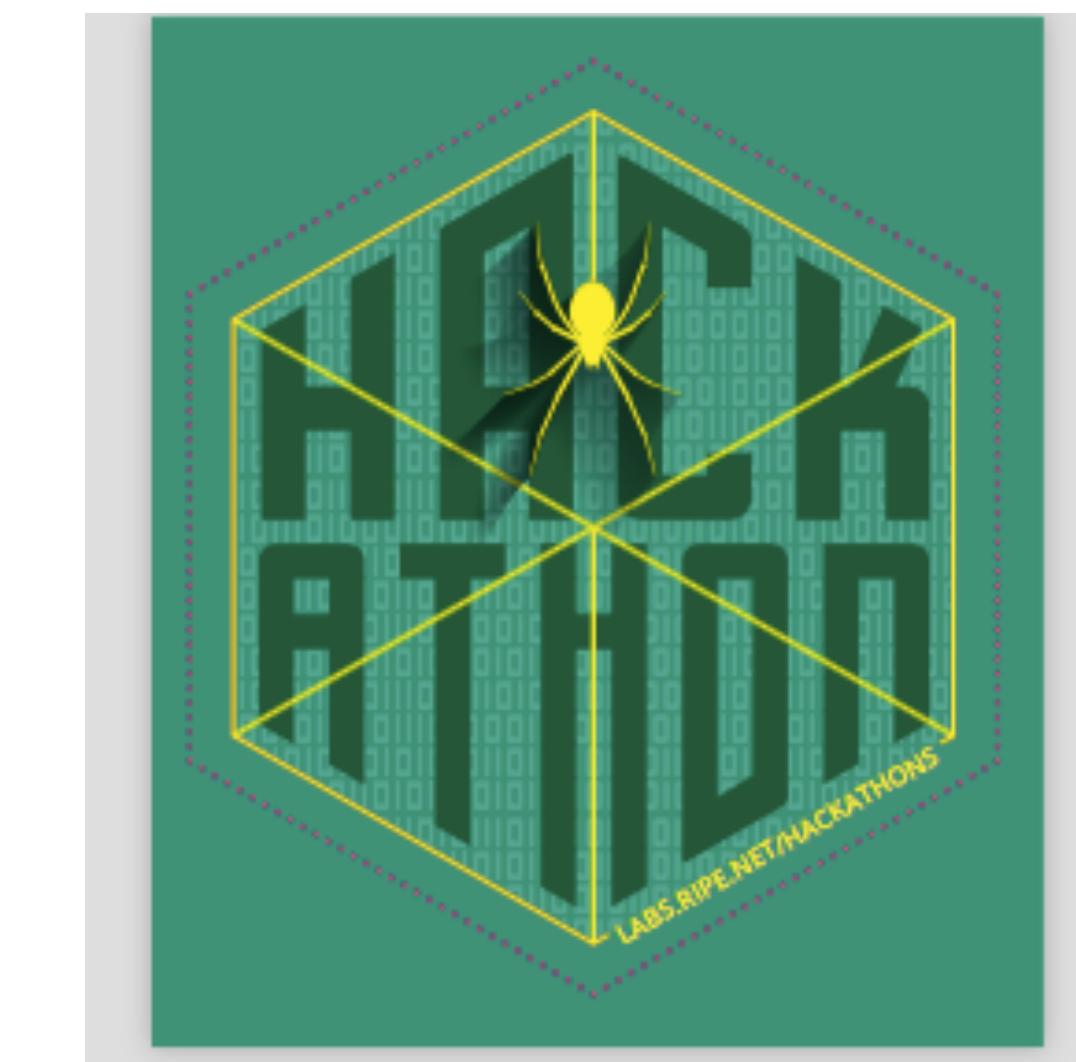
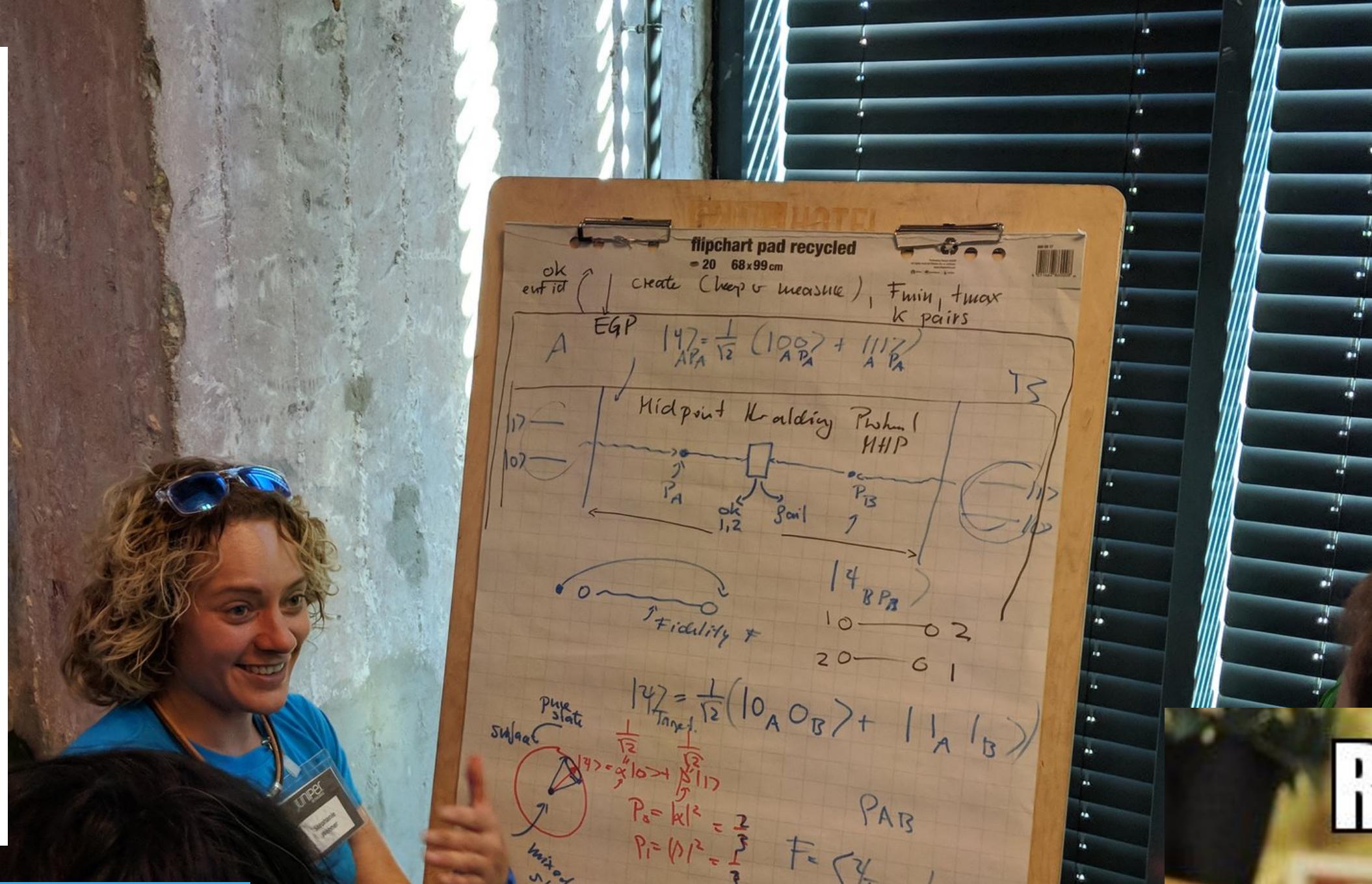


- Hackathon Recap: 12.12.2022. 4PM CET, online!
- World Quantum Internet Day : 14 April 2023
- IETF hackathon / IRTF: <https://irtf.org/qirg>
 - 25-26. March 2023, Yokohama: <https://www.ietf.org/how/runningcode/hackathons/116-hackathon/>
- SEE-11/ RIPE NCC Regional Meeting: Split, 4-5 April 2023
- RIPE 86: Rotterdam, May 2023 ripe86.ripe.net
 - RIPE NCC Supporting newcomers through:
 - Academic Cooperation: ripe.net/raci
 - Fellowship programme: ripe.net/fellowship

Previous RIPE NCC Hackathons



- RIPE Atlas [DataViz](#) (March 2015, Amsterdam)
- RIPE Atlas [Tools for Operators](#) (October 2015, Bucharest)
- RIPE Atlas [Interfaces](#) (April 2016, Copenhagen)
- [IXP Tools](#) (October 2016, Madrid)
- IXP Tools [Code-Sprint](#) (April 2017, Amsterdam)
- [DNS Measurements](#) (April 2017, Amsterdam)
- Version6 (November 2017, Copenhagen)
- Network Operators Tools (June 2018, Dublin)
- (first) [Quantum Internet Hackathon](#) (October 2018, Amsterdam)
- RPKI Deployathon (March 2019, Amsterdam)
- IoT Hackathon (October 2019, Rotterdam)
- Pan-European Quantum Internet Hackathon (2019)
 - <https://labs.ripe.net/author/becha/results-of-the-pan-european-quantum-internet-hackathon/>
- Virtual Hackathon (March - May 2020)
 - <https://labs.ripe.net/author/becha/report-from-the-first-virtual-ripe-ncc-hackathon/>
- RIPE Atlas SW Probes Deployathon (2020)
 - <https://labs.ripe.net/author/becha/report-from-the-ripe-atlas-software-probes-deployathon/>



Slack: https://join.slack.com/t/quantumintern-wig3176/shared_invite/zt-1jvupxck6-b~EvFGJTdq~Oj5mGDL3O0A
GitHub: <https://github.com/Lizaterdag/QIH-2022/>