# IETF 116 Quantum Internet Research Group

27 March 2023

This session is being recorded

IETF 116 Yokohama

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- The IRTF routinely makes recordings of online and in-person meetings, including audio, video and photographs, and publishes those recordings online
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- As a participant or attendee, you agree to work respectfully with other participants;
  please contact the ombudsteam (<a href="https://www.ietf.org/contact/ombudsteam/">https://www.ietf.org/contact/ombudsteam/</a>) if you have questions or concerns about this
- See <u>RFC 7154</u> (Code of Conduct) and <u>RFC 7776</u> (Anti-Harassment Procedures), which also apply to IRTF

### Goals of the IRTF



- The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organisation, the IETF, focuses on shorter term issues of engineering and standards making
- The IRTF conducts research; it is not a standards development organisation
- While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology
- See "An IRTF Primer for IETF Participants" <u>RFC 7418</u>

### IETF 116 Meeting Tips

### This session is being recorded

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#### Remote participants

- Make sure your audio and video are off unless you are chairing or presenting during a session
- Use of a headset is strongly recommended

Onsite tool

# Quantum Internet Research Group QIRG @IETF116 Yokohama 27 March 2023

Chair slides

Rodney Van Meter Wojciech Kozlowski

### Agenda

- Administrivia + RG Status + hybrid meeting issues (5 min)
- Testbed networks around the world (50 min):
  - QDNL testbeds
    - Jesse Robbers
  - Design and Implementation of the Illinois Express Quantum Metropolitan Area Network
    - Joaquin Chung
  - Quantum Internet Task Force (Japan)
    - Shota Nagayama
- draft-irtf-qirg-quantum-internet-use-cases (10 min)
  - Melchior Aelmans
- Experimental demonstration of entanglement delivery using a quantum network stack (20 min)
  - Carlo Delle Donne
- Book announcement (5 min)
  - Rod Van Meter

### **Document Status**

- draft-irtf-qirg-principles is now published as RFC 9340.
- draft-irtf-qirg-quantum-internet-use-cases
  - Active, will be discussed today