

IEEE Communications Society Quantum Communications and Information Technology - ETC (QCIT-ETC)

Meeting held at IEEE Globecom 2020

February 16, 2021

9am – 11am

Virtual

Meeting Minutes

Minutes taken by: Andrea Conti

Participants

The total of participants was 46, as listed at the end of this document.

1. Welcome / Introduction

The Chair Lajos Hanzo opened the meeting at 11am.

The 4 founding members are: Lajos Hanzo, Andrea Conti, Michael Ng, and Peter Mueller.

The Chair presented the agenda as below

1. Approval of the Agenda
2. Welcome / Introduction
3. Approval of Previous Meeting Minutes
4. QCIT-ETC Awards
5. Report on ETC Technical Activity Council Meeting
6. Report on Workshops & Conferences
7. Report on Keynotes & Invited Talks
8. Report on Publications & Future Events
9. Standards Liaison
10. New Business Items
11. Next QCIT-ETC Meeting
12. Adjourn

The QCIT-ETC website is <http://qcit.committees.comsoc.org/>

There are two e-mail distribution lists (450+ members):

- qcit@comsoc.org

for internal announcements only (e.g., ICC, Globecom, Committee meetings like today, and Awards)

- qcit-announce@comsoc.org

for CFP email distribution list. It is open to all signed-up members to distribute QCIT related CFPs

Sign-up: Send “join QCIT(-ANNOUNCE)” message to list@comsoc.org

Unsubscribe: Send “SIGNOFF QCIT” message to list@comsoc.org

2. Approval of the Agenda

The agenda was approved.

3. Approval of Previous Meeting Minutes

The minutes of previous meeting (held at ICC 2020) circulated via QCIT website were approved.

4. QCIT-ETC Awards

The information related to this point are the same of previous meeting as reported below.

The QCIT-ETC award program will start as soon as we receive approval from the ETC TAC.

Acting Awards Committee Chair is the elected QCIT-ETC Chair. Members of the Awards Committee will be the Awards Committee Chair, three QCIT officers, one external member.

Calls for nominations as defined in the QCIT-ETC Policies & Procedures will be sent out via our distribution list. For details, see QCIT URL:

<http://qcit.committees.comsoc.org/>

5. Reports on ETC-TAC Meeting

From the previous ETC-TAC Meeting:

Overall, our evaluation was positive and the level of active participation with technical presentations during the meetings, the organization of several editions of QCIT Workshops, the publication of a dedicated JSAC special issue, and several invited talks.

The membership is growing. We also aim to have a stronger connection with communities including sensing and computing and possibly physics or information theory.

We'd love to see this ETI become the key hub of knowledge and information for the quantum communications field.

6. Reports on Conferences

A report on the Sixth QCIT Workshop at Globecom 2020, was given. Two sessions and one keynote speech by Prof. Gui-Lu Long "Quantum Secure Direct Communication: Current Status and Perspective Application in Network" were organized.

This was followed by a brief discussion on other special sessions organized since previous meeting at other conferences.

Please use the QCIT-ANNOUNCE distribution list to send your CFPs and report your conferences, workshops, sessions, etc.

If you are looking for IEEE ComSoc support for your event, please ask anyone of the officers.

7. Reports on Keynotes and Invited Talks

The list of keynotes, invited talks, and tutorial given by QCIT members was given, including the IEEE webinar by Lajos Hanzo.

8. Reports on Publications

It was encouraged to submit papers at the QCIT workshop that will be held during Globecom 2021. Submissions will be handled via EDAS and you will receive other updates in the near future.

In ICC'21 there will be the first SAC Track on Quantum.

Please use the QCIT-ANNOUNCE distribution list to send your CFPs and report your special issues, book chapters, and so on.

QCIT is actually looking for a member who would be willing to serve in the position of an Appointed Representative of Publications.

If you are interested, please contact the officers.

9. Standards Liaison

No news from previous meeting. The QCIT-ETC is supporting standards work within the field.

IEEE SA - 1913 - Software-Defined Quantum Communication

<http://standards.ieee.org/develop/project/1913.html>

IEEE SA - 1913 - Software-Defined Quantum Communication IEEE.org IEEE Xplore Digital Library IEEE Standards.

Liaison: [Steven Bush \(bushsf@research.ge.com\)](mailto:bushsf@research.ge.com)

IEEE SA - 7131 - Standard for Quantum Computing Performance Metrics & Performance Benchmarking

<http://standards.ieee.org/develop/project/7131.html>

IEEE SA - 7131 - Standard for Quantum Computing Performance Metrics & Performance Benchmarking IEEE.org IEEE Xplore.

Liaison: [Peter Mueller \(pmu@zurich.ibm.com\)](mailto:pmu@zurich.ibm.com)

IEEE SA - 7130 - Standard for Quantum Computing Definitions

<http://standards.ieee.org/develop/project/7130.html>

IEEE SA - 7130 - Standard for Quantum Computing Definitions IEEE.org IEEE Xplore Digital Library IEEE.

Liaison: [Peter Mueller \(pmu@zurich.ibm.com\)](mailto:pmu@zurich.ibm.com)

10. New Business Items

Hausi Muller, General Chair IEEE Quantum Week 2021 and Co-Chair IEEE Future Directions Quantum Initiative, presented to the assembly the IEEE Quantum Initiative and the IEEE Quantum Week, website <https://quantum.ieee.org>

The IEEE Communications Society's President Vincent Chen introduced to the assembly the European Union Agency for Cybersecurity's initiative

https://www.enisa.europa.eu/publications/post-quantum-cryptography-current-state-and-quantum-mitigation/at_download/fullReport#page23

He also suggested to pick collectively a project and make it architecture.

MEETING TECHNICAL TALKS

Technical presentations were given, as listed below.

- Gui-Lu Long, Tsinghua University and Beijing Academy of Quantum Information sciences, "Quantum Secure Direct Communication and Its Potential Applications"
- Andrea Conti, University of Ferrara, "Quantum Discrimination of Noisy Photon-Added Coherent States"
- Dilip Krishnaswamy, Vice President (Emerging Tech R&D) of Reliance Jio Platforms Ltd in India, "Quantum Processing for System Optimization in emerging Networks"
- Andy Schreier, University of Oxford, "Polarization Calibration Scheme in the Practical Handheld Free Space Quantum Key Distribution System"

9. Next QCIT-ETC Meeting

Next QCIT ETC meeting will be held at IEEE ICC 2021.

10. Adjourn

The meeting was adjourned at 11 am.

Participants QCIT Meeting

Name	Affiliation	Email
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