

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

Meeting held at IEEE ICC 2019

May 21, 2019

4pm – 6pm

Shanghai

Meeting Minutes

Minutes taken by: Andrea Conti

Participants

The total of participants was 19, all in presence.

1. Welcome / Introduction

The Chair Lajos Hanzo opened the meeting at 4pm. There were 18 members present.

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

All participants introduce themselves and reported on their interest in the field of quantum communications and information technology.

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 (400+ 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 Globecom 2018 in Abu Dhabi) 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 ETC-TAC Meeting at Globecom 2018:

Overall, our evaluation was positive. This is an important topic and has some very good people involved and is making good progress. ETC-TAC still think it is too early to discuss elevation to a full TC, however. We'd like to set a goal of doing this in 2 years, or even 1 year if you think activities can be ramped up a lot.

Some examples of things we'd like to see (and may be in progress already):

- More knowledge dissemination, including tutorials and accessible materials. A great idea could be to do a ComSoc Best Readings, and I think you might be doing one.
- Special issues (Magazine, JSAC, etc.)
- Broader membership, and activities by more members beyond the officers (also a breakdown of where these members are, industry vs. academia, etc.)
- Connections to communities beyond SP, e.g. 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.

There will be a new review and it is important to increase the number of members and of the activities, especially dedicated journal's special issues.

6. Reports on Conferences

A report on QCIT Workshop at Globecom 2018, Singapore, was given, followed by a brief discussion on other special sessions at conferences. Three sessions were organized and a keynote "Quantum Communications at Local and Global Scales" by Mohsen Razavi (School of Electronic and Electrical Engineering, University of Leeds, UK).

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 new following keynotes and invited talks have been given by QCIT members:

- Participation to Schools:

- "QCALL School of Quantum Communications Networks", Padova, Italy, 19-22 September 2018. URL <http://www.qcall-itn.eu/sqcn/>
- "Quantum Information for Developers 2018", Quantum computing school and Hackathon, ETH Zurich, 11-14 September 2018. URL <https://qid.ethz.ch/>

- At ICC 2019, tutorial TUT-06: *Quantum Internet: Wiring the Weirdness* by A.S. Cacciapuoti and M. Caleffi from University of Naples Federico II

8. Reports on Publications

It was encouraged to submit papers at the QCIT workshop that will be held during Globecom 2019. Submissions will be handled via EDAS and you will receive other updates in the near future.

A JSAC Special Issue is ongoing (submission deadline July 1st, 2019) on *Advances in Quantum Communications, Computing and Cryptography*, by Lajos Hanzo (advisor), Soon Xin Ng, Andrea Conti, Gui-Lu Long, Peter Mueller, Akbar Sayeed, Jinhong Yuan

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

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

NAE report <https://www.nap.edu/catalog/25196/quantum-computing-progress-and-prospects>

Worldwide Large Regional Programs

US IARPA and others

China Secure Backbone

EU Flagship and Quanterra

European Efforts:

European Flagship Program on Quantum Technologies

Meeting talk by Angela Sara Cacciapuoti and Marcello Caleffi on “Quantum Internet: Wiring the Weirdness”

9. Next QCIT-ETC Meeting

Next QCIT ETC meeting will be held at IEEE ICC 2019 in Shanghai.

10. Adjourn

The meeting was adjourned at 6 pm.

Participants QCIT Meeting

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