

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

**Meeting at ICC 2017**

**Place/Room: Hyatt Regency Etoile/Monceau  
Date/Time: Tuesday May 23, 2017, 2:00pm – 3:30pm  
Paris, France**

## Mission

The Emerging Technical Committee (ETC) on Quantum Communications and Information Technology (QCIT) promotes all types of communications theory and engineering to foster quantum technology. Our field of interests start from the basic radio frequency technology, addresses aspects of control instrumentation, error correction, coding theory, system architecture, simulation, algorithms, and eventually applications. The committee will connect people from Industry and Academia by supporting conferences, symposia, technical sessions, publications, etc., where information is exchanged within the scope of interest of the QCIT-ETC.

# Meeting Agenda

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 Conferences
7. Report on Publications
8. Standards Liaison
9. New Business Items
10. Next QCIT-ETC Meeting
11. Adjourn

## 2. Welcome / Introduction I

QCIT-ETC Officers

Chair: Lajos Hanzo (U. of Southampton, UK)

Vice-Chair: Peter Mueller (IBM Zurich Research Lab, Switzerland)

Secretary: Andrea Conti (U. of Ferrara, Italy)

Standards and Media: Michael Ng (U. of Southampton, UK)

Membership: 160+



## 2. Welcome / Introduction II

The QCIT-ETC website:

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

- Two mail distribution lists:

- [qcit@comsoc.org](mailto:qcit@comsoc.org)

Internal announcements only

ICC, Globecom, Committee meetings like today, Awards

- [qcit-announce@comsoc.org](mailto:qcit-announce@comsoc.org)

CFP email distribution list

Open to all signed-up members to distribute QCIT related CFPs

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

Unsubscribe: Send “SIGNOFF QCIT” message to [list@comsoc.org](mailto:list@comsoc.org)

## 3. Approval of Previous Meeting Minutes

The last QCIT meeting was held at IEEE Globecom 2016 in Washington DC, USA.

The meeting minutes and slides are published on the QCIT URL (use tab “Meetings”):

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

## 4. QCIT-ETC Awards

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. Report on ETC-TAC Meeting I

From ETC-TAC Meeting at GlobeCom 2016

QCIT was started since about a year only. It was reviewed together with all ETCs and the put on probation (come back in two years).

About possible overlapping with Nanoscale Quantum Molecular Comms STC: the outcome was that it is important to keep the two ETC initiatives separate (no merging) with one ETC focusing on bio/nano and the other ETC focusing on quantum comms/info

## 5. Report on ETC-TAC Meeting II

From ETC-TAC Meeting at ICC 2017:

There will be a new review by Globecom 2017

Nanoscale Quantum Molecular Comms STC asked to remove “Quantum” from its name

Organization of the yearly ETC special issue for JSAC (most likely we could try for 2019). Any volunteer?

A discussion is ongoing for starting Awards since ETC stage

## 6. Report on Conferences I

Since last meeting:

QCIT Workshop at GlobeCom 2016, Washington DC, USA

1 Keynote (Erol Gelenbe), 8 Papers, 1 Panel

See: <https://edas.info/web/gc16workshopsqcit/index.html>

QCFN Workshop at VTC-Spring 2017: May 15 2017, Sydney, Australia

1 Keynote (Michael Ng)

See: [http://www.ieeevtc.org/vtc2017spring/workshops.php#wkshp\\_8](http://www.ieeevtc.org/vtc2017spring/workshops.php#wkshp_8)

## 6. Report on Conferences II

Since last meeting:

Keynote “Harnessing Quantum-Computing & Signal Processing in Wireless Communications” by Lajos Hanzo at IEEE WiSPNET, March 2017

Keynote “Developments in Security for a Future with Quantum Computers” by Peter Mueller at IEEE ICACCI’16

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

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

## 7. Report on Publications

We would like also to encourage all quantum enthusiasts to submit papers at the **QCIT workshop** that will be held during Globecom 2017.

Submission deadline: set by the Globecom Workshop Chairs to **July 1st** p.v. Submissions will be handled via EDAS and you will receive other updates in the near future.

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 newly elected officers.



## 8. Standard Liaison

The QCIT-ETC is supporting standards work within the field.

IEEE standard proposal for Software-Defined Quantum Communication (SDQC) [Steven Bush \(bushsf@research.ge.com\)](mailto:bushsf@research.ge.com)

## 9. New Business Items

### Worldwide Large Regional Programs

- US IARPA and others
- China Secure Backbone
- EU Flagship and Quanterra
- ...

### European Efforts:

- “**Industry Perspectives** on Quantum Technologies” – a study to prepare for the European Flagship Program on Quantum Technologies.  
<http://qcit.committees.comsoc.org/files/2017/05/Industry-perspectives-of-Quantum-Technologies.pdf>
- «**Quanterra** initiative» <http://quanterra.eu/news/22-results-of-the-quanterra-proposers-day-in-malta>
- «**EU Flagship** Progress» <https://ec.europa.eu/digital-single-market/en/news/quantum-europe-2017-towards-quantum-technology-flagship>

## 10. Next QCIT-ETC Meeting

The next IEEE ComSoc's Quantum Communications and Information Technology ETC (QCIT-ETC) meeting will be held at  
IEEE Globecom 2017,  
December, 4-8, 2017, Singapore

# 11. Adjourn

**Thank you for attending!**