



TRANSATLANTIC QUANTUM FORUM

HYBRID EVENT | SEPTEMBER 16-17, 2022

The goal of the Transatlantic Quantum Forum (TQF) is to explore (potential) policy implications of quantum technologies with a focus on quantum communication and quantum computing. With many developments still unknown, the TQF wants to facilitate conversations on governance structures, institutional design, and regulatory frameworks concerning quantum technologies. Therefore, it investigates currently arising core challenges associated with quantum technologies, such as:

- How should we best promote innovation in quantum technologies?
- For which purposes should quantum technologies (not) be applied?
- How can we mitigate challenges and avoid risks that might come with the general rollout of quantum technologies?

To address these and other questions on the future governance of quantum technologies, the TQF brings together scholars from different disciplines and across the Atlantic. Moreover, it aims to involve stakeholders from various societal spheres to ensure a broad spectrum of perspectives.

CONVENORS

The TQF is a joint initiative of four research centers in the U.S. and Europe: The Center for Quantum Networks at the University of Arizona, the UCLA Institute for Technology, Law & Policy, the Yale Information Society Project, and the Quantum Social Lab at the TUM School of Social Sciences and Technology hosting the European site in collaboration with the TUM Think Tank.

PROGRAM

The TQF convenes at three virtually-connected hubs in Los Angeles, New Haven and Munich. It takes place on-site and online (virtual sessions in light blue) across multiple time zones. The program for Munich is the following:



AGENDA

FRIDAY, SEPTEMBER 16 2022

10:30AM – 1:30PM

STUDENT POSTER SESSION

UNTIL 2:45PM

**REGISTRATION FOR
CONFERENCE GUESTS**



3:00PM – 4:30PM

**QUANTUM FUTURE
WORKSHOP: SCIENCE,
INDUSTRY & PUBLIC SECTOR**

4:30PM – 5:00PM

REFRESHMENTS



5:00PM – 8:00PM

**TRANSATLANTIC QUANTUM FORUM
– PART 1**

Papers & discussions across the Atlantic

Matthias Kettemann, Meryem Vural -
Q-Day Law: Post-Quantum Algorithms
and the Protection of Future Freedoms
Today

Joris van Hoboken - Law and
Governance of Quantum Technologies

Laura DeNardis - Quantum Internet
Protocols

Ido Kilovaty - Data Breach Law in a
Post-Quantum World

FROM 8:00PM

**EVENING RECEPTION AT
THE TUM THINK TANK**





AGENDA

SATURDAY, SEPTEMBER 17 2022

10:30AM – 1:30PM

TRANSATLANTIC QUANTUM FORUM – PART 2

Papers & discussions – Europe only

Johanna Barzen, Frank Leymann:
Quantum Workforce: Human Resources for the Future of Computing

Astrid Bötticher, Zeki Seskir, Johannes Ruhland: Introducing a Research Program for Quantum Humanities

Axel Ferrazzini, Mark Pecen, Amnon Reichman: Quantum: Design, Policy, Regulation and Risk Management

Idil Kula, Zeki C. Seskir: 'Quantum Secure' as an Emerging Topic: A Landscape Study

1:00PM – 2:30PM

LUNCH BREAK





AGENDA

SATURDAY, SEPTEMBER 17 2022

2:30PM – 4:30PM

NETWORKING AND INTRODUCTION OF QUANTUM INITIATIVES

incl. Quantum Delta NL; Quantum Humanities Network; Quantum LifeLong Learning; TUM Quantum Social Lab

4:30PM – 5:00PM

REFRESHMENTS



5:00PM – 8:00PM

TRANSATLANTIC QUANTUM FORUM – PART 3

Papers & discussions across the Atlantic

Charles McElroy - Knowledge Graph of the Quantum Computing Public Policy Landscape

Tabrez Ebrahim - Quantum Standards Development Organizations & Their Patent Policies

Christopher Yoo - Transatlantic Quantum Forum: Working Paper

Sukwoong Choi, Neil Thompson, William Moses - Which Problems Will Quantum Computing Accelerate (And Which Won't It)?