

Day 1 - September 3

8:00-8:45 Registration & Coffee; Poster/Stand Installation

Session chair: Mika Sillanpää

9:00 InstituteQ Welcome Address

Ilkka Niemelä (Aalto University President)

9:10 Opening Speech

Sakari Puisto (Minister of Economic Affairs at Ministry of Economic Affairs and Employment (TEM))

9:25 Opening remarks on international quantum policy

Marianne Nissilä (Ministry for Foreign Affairs)

9:35 Finnish Quantum Ecosystem: Opportunities and Growth Strategies jointly by Erja Turunen (VTT), Jukka Pekola (Aalto University), Per Öster (CSC)

10:00-10:30 Coffee Break & Posters/Exhibition

Session chair: Milja Kalliosaari

10:30 Launch of the Finnish Quantum Strategy

Janne Peltola (Ministry of Economic Affairs and Employment (TEM))

10:40 From Vision to Action: Aligning Quantum Policy Across Borders

Moderator: Janne Peltola (Ministry of Economic Affairs and Employment (TEM))
Panelists: Hannu Kauppinen (QMill), Juha Vartiainen (IQM), Laurent Olislager (European

Commission), Kristine Helen Falgren (Danish Quantum Community)

11:30 Group photo in the banquet hall

11:45-12:45 Lunch & Posters/Exhibition

Session chair: Matti Palomäki

12:45 Quantum Europe Strategy and actions

Laurent Olislager (European Commission)

13:00 Nordic Quantum Network overview

Mikael Fogelström (Chalmers University of Technology and Nordita)

13:15 Strengthening Nordic Synergies in Quantum Technology

Ville Mäkinen (Nordic Innovation (Nordic Council of Ministers))



13:25 Quantum Ecosystem: Innovation, Cross-Sector Collaboration, and

Commercialization

Moderator: Pekka Pursula (VTT)

Panelists: Gudmund Høst (Nordforsk), Peter Knight (National Physical Laboratory UK),

Inka Mero (Voima Ventures), Himadri Majumdar (SemiQon)

14:10-14:40 Coffee & Posters/Exhibition

Session chair: Kimmo Tuominen

14:40 Higher education perspectives on Finnish Quantum Strategy

Kalle-Antti Suominen (University of Turku)

15:00 Panel discussion: Quantum Literacy and Education

Moderator: Mahdi Moghaddam (Finnish Quantum Flagship)

Panelists: Ismo Koponen (University of Helsinki), Tzula Propp (Diversity in Quantum),

Jani-Petri Martikainen (Aalto University), Marilù Chiofalo (University of Pisa)

15:45 Neural-network-based design and implementation of fast and robust quantum gates

Ilya Moskalenko (Aalto University)

16:00 Heat rectification in a qubit-resonator system

Luca Magazzù (Aalto University)

16:15 Closing Talk: 60 years of low-temperature quantum science and technology in Finland

Pertti Hakonen (Aalto University)

16:45-18:30 Evening reception





Day 2 - September 4

8:30-9:00 Registration & Coffee

Session chair: Pauliina Rajala

9:00 Finnish Quantum Flagship Welcome Address

Peter Liljeroth (Aalto University)

9:15 Building a quantum ecosystem

Peter Knight (National Physical Laboratory UK)

10:00 Networked Quantum Computing as a Service: Addressing scalability,

privacy, integrity and utility challenges

Elham Kashefi (UK National Quantum Computing Center (NQCC))

10:30-11:00 Coffee Break & Posters/Exhibition

Session chair: Mika Sillanpää

11:00 Quantum control of levitated dielectrics

Nikolai Kiesel (University of Vienna)

11:30 Cryogenic Racetrack Memory for Quantum Applications

Stuart Parkin (Max Planck Institute)

12:00 Quadratic Coupling for Non-Classical States: Protocols and Error Correction with Superconducting Circuits

Francesco Massel (University of South-Eastern Norway)

12:20-13:30 Lunch & Posters/Exhibition

Session chair: Juho Pirinen

13:30 The roadmap to quantum advantage and beyond

Jerry Chow (IBM)

14:10 Unlocking the Power of IQM's On-Premise Quantum Computers in HPC

integration

Jan Goetz (IQM)

14:25 Nokia views on quantum

Mikko Uusitalo (Nokia Bell Labs)

14:40 Realizing the Value of Quantum Computing Today

Alan Baratz (D-Wave Quantum)

15:00-15:30 Coffee & Posters/Exhibition

FQD 2025 IS SUPPORTED BY:





Session chair: Rahinatou Njah Nchiwo

15:30 Three Minute Thesis Pitching Competition

Host: Rahinatou Njah Nchiwo (Aalto University)

Jury: Tzula Propp (Diversity in Quantum), Jimmy Salermo (Genie Design Consulting) Finalists: Christa Schauman (Aalto University), Kristiana Frei (Aalto University), Alina Helena Sánchez Gallardo (University of Oulu), Anshika Mishra (Aalto University)

16:00 Scalable Probes of Entanglement in Many-Body Systems and Monitored Quantum Dynamics

Ali Moghaddam (Aalto University)

16:15 Controlling and boosting single-molecule light emission Atif Ghafoor (University of Jyväskylä)

16:30 Closing remarks & 3MT winner announcements Mika Sillanpää (Aalto University)