

QC@ESA



Tuesday 10 March 2026 - Tuesday 10 March 2026

ESTEC

Scientific Programme

Quantum Computing at ESA Preliminary Programme

Opening Session

09:15 – 09:30

Welcome Address

Nicoletta Wagner & Christophe Honvault

09:30 – 10:15

Keynote Lecture

Quantum Computing for Earth Observation: The ESA Φ -lab's Initiatives

Gabriele Meoni

10:15 – 10:45

☐ Coffee Break

Session 1 — Fundamentals

10:45 – 11:15

Encoding Astrodynamics Problems on Quantum Hardware

Waldemar Martens

11:15 – 11:45

Noisy Quantum Circuit Simulation via Automated Reasoning

Dolf Huybrechts

11:45 – 12:15

Quantum Circuit Synthesis Beyond Reinforcement Learning

Thore Gerlach

12:15 – 14:00

☐ Lunch Break

Session 2 — Distributed Quantum Computing

14:00 – 14:30

Quantum Metrology for Distributed Quantum Computing

Richard Murchie

14:30 – 15:00

Satellite-Distributed Entanglement for Future Quantum Datacenter Interconnects

Thomas Scarinz & Victor Virag

15:00 – 15:30
 Coffee Break

Session 3 — To the Stars and Beyond

15:30 – 16:00
(Withdrawn)
Assessing the Potential of Quantum Computing for ESA Mission Domains
Waldemar Martens & Evridiki Ntagiou

16:00 – 16:30
A Generalized Quantum Causal Model Beyond Matrix Representations
Théo Verhelst

16:30 – 16:45
Event Closure