Building Quantum Futures: Sociotechnical Visions and Their Implications

On June 8-9 2026 we organized an interdisciplinary workshop on future quantum imaginaries. The workshop brought together (early-career) scholars from STS, history and philosophy of science, communication science, quantum science and related field to discuss quantum imaginaries in various domains. The workshop was organized by **Kristian Hvidtfelt Nielsen** (Aarhus University), **Julia Cramer** (Leiden University), **Esben Rohan Christensen** (Accademia di Danimarca – The Danish Academy for Science and Art in Rome) and **Shaeema Zaman** (Science Melting Pot). 22 participants joined the two-day workshop at Aarhus University.

The two workshop days included keynote lectures by **Fabienne Marco** (Quantum Social Lab, TUM, Governing What Doesn't Exist Yet: Pressure Points and Futures in the AI-to-Quantum-AI Transition), **Marilù Chiofalo** (University of Pisa, Indisciplined Minds Navigate Quantum Futures with the Compass of Scientific Humanism), **Zeki Seskir** (Karlsruhe Institute of Technology, From Quantum Hype to Responsibility: Technology Assessment and the Politics of Quantum Futures) and **Michal Krelina** (Stockholm International Peace Research Institute, Quantum technology, security and dual-use). Furthermore, 12 early-career researchers presented their research.

Both afternoons contained interactive worksessions; firstly, explorative, to identify emerging themes and research priorities and secondly, consolidating themes and defining shared priorities.
During the explorative session, groups discussed themes, tensions, gaps and interventions concerning the future of quantum technologies. Six groups discussed among each other, and exchanged thoughts. During this worksession, six themes emerged, being: **Narrative, Education, Security, Accesibility, Governance and Commercialization.** In the consolidating session, participants chose a theme to work on. In each theme, (research) questions, actors and tools were discussed.

During the workshop, it became clear that the future of quantum technologies brings challenges at the sociotechnical level that need interdisciplinary and interactive thought. This workshop initiated open discussions among academics, focused on pressing themes such as governance, security and accessibility. Narratives, education and commercialization play a crucial role in these discussions. This workshop will be followed-up by workshop with selected stakeholders in the quantum ecosystem and society to build upon the themes and open questions.