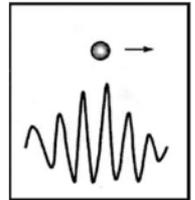
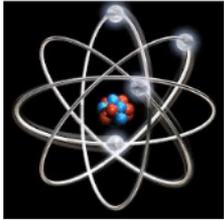


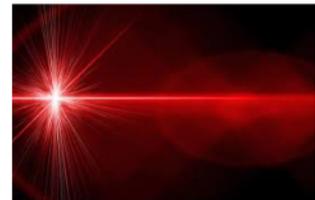
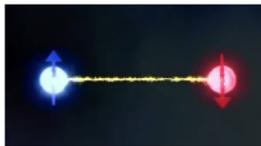
Quantum science and Technology at UiO (and beyond)

Susanne Viefers, Dept. of Physics, UiO

Orsay, 25.3.2026



- Quick reminder: What is Quantum Technology
- QST research and education at UiO
- National / ecosystem
- Nordic/international



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Super quick primer on Quantum Technology

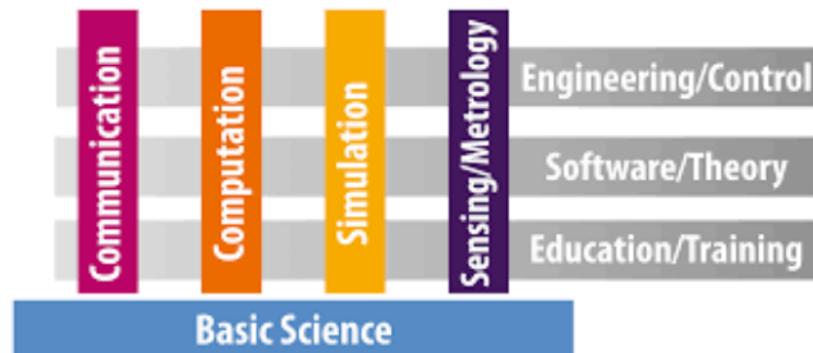
Basic idea: Physical laws are the basis for all kinds of technology. In quantum technology, one deliberately exploits properties of the quantum physical laws

Control, manipulate and exploit the “strangest” quantum properties / states to create new types of functionality (e.g. superposition, entanglement)

Fundamentally new quantum technology!

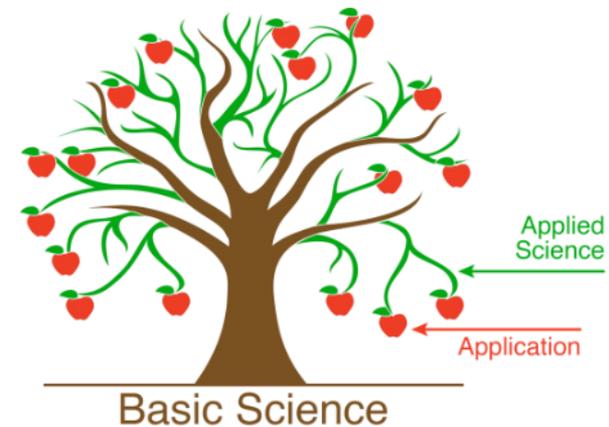
NB! Not one single technology, but several categories

Varying levels of maturity – from still pure basic research to existing products on the market



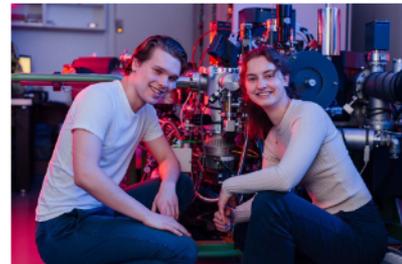
QST research at UiO

- Physics, experimental: Quantum materials for quantum sensing.
Infrastructure: UiO MiNaLab
Center for defects in semiconductors for quantum sensing
- Physics, theoretical and computational: quantum information, algorithms, communication, quantum machine learning, quantum condensed matter...
- Chemistry: Quantum chemistry, material science
- Mathematics: quantum information theory
Centre for Quantum Computing and Applications



QST education at UiO: New study program

- Integrated part of overall strategic work on quantum, educate the future quantum literate workforce
- Earmarked Government funding, 100 students in total
- BSc and MSc in collaboration between physics, chemistry, math and informatics
- Aim for cross-disciplinary education by high degree of flexibility
- External partners
- Nordic / international collaboration on education
- Developed at record speed autumn 2025, launch August 2026
- First hints of good application numbers. [Campaign movie](#)



National / ecosystem

- GEMINI center (national scientific QST community)
- Norway Quantum House (national political network)
- Creating national meeting platforms between academia, industry, institute sector, politicians, funding agencies and defense sector to build quantum ecosystem
- National quantum strategy expected 2026
- Government funding for research and education



Stronger together: Nordic/international

- **Nordic Quantum:** Scientific-strategic network; joint strategy for collaboration and establishing the Nordics as a world-leading region in QST
 - Nordic graduate school (NORDITA), Nordic PhD conference and more
- Collaboration agreement MN/UiO – NBI Copenhagen – Novo Nordisk – Industry, towards a mission driven Nordic center on quantum sensing
- Initiative for collaboration Copenhagen - Oslo – Delft – Innsbruck on education in experimental quantum technology
- Various bilateral meetings involving embassies etc (including France)



Thanks for your attention!



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