Speakers

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Deutsches Museum (DM)

Museumsinsel 1 80538 München www.deutsches-museum.de



We know entanglement.

Quantum Science and Technology in Munich

www.mcqst.de

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About us

The Munich Center for Quantum Science and Technology (MCQST) is a Cluster of Excellence funded by the German Research Foundation (DFG, Deutsche Forschungsgemeinschaft). It brings together over 50 research groups from various disciplines to collaborate on an ambitious research program covering all fields of Quantum Science and Technology (QST).

Our mission

MCQST sets out to build a world leading research center for quantum science and technology. Our main goal is to discover and understand the novel and unifying concepts of QST, making them tangible and practical for the development of next generation quantum devices.

Research

Our research program is structured in seven interconnected research units, bridging various disciplines and institutions. It covers the entire range from fundamental science through technology and material development to applications.

Scientific goals

A

Quantum

Information

Theory

B

Quantum

Simulation

C

Quantum

Computing

X

Explorative

Directions

MCOST

Munich Center

for Quantum

Science &

Technology

D

Quantum

Communication

Quantum

Matter

E

Quantum

Metrology

& Sensing

- Developing fundamental concepts and tools of quantum information theory.
- Building fully programmable quantum simulators based on cold atoms.
- Developing hardware and software components for scalable quantum computers.
- Creating building blocks for secure world-wide quantum communication.
- Developing high precision sensors based on quantum effects.
- Designing and characterizing novel two-dimensional quantum materials.
- Using techniques of quantum information science to get insight in remote fields of science.

Supporting and promoting science

We offer a plethora of support programs ranging from funds for young investigators and a seed funding program to investments in infrastructure and large instrumentations. With events for the scientific community from academia and industry as well as the broader public we create a unique research environment in Munich.

Education and training

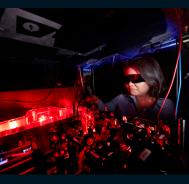
With a summer program we introduce Bachelor's students to QST. In our structured education program from the Master's to the Postdoctoral level, we offer financial, administrative and logistical support, assisting junior researchers to build their independent teams.

International collaborations

We partner up with other QST centers to accelerate progress in research and technological developments. Through our vibrant guest program we aim to attract international scientists to Munich.

Outreach

A laboratory for school kids (PhotonLab), science fairs, public lectures and science slams: we engage with the public in various ways to entangle the quantum world with every-day-life.



Curious to discover more?

Visit our website www.mcqst.de