

The Vienna Center for Quantum Science and Technology
VCQ

invites you to a

COLLOQUIUM TALK

Rachel Grange
(ETH Zürich)

**Lithium niobate on Insulator and Beyond:
Overcoming Fabrication Challenges for Integrated and Flat Photonics**

Nonlinear and electro-optic devices are present in our daily life with many applications: light sources for microsurgery, green laser pointers, or modulators for telecommunication. Most of them use bulk materials such as glass fibers or high-quality crystals, hardly integrable or scalable. Even the fast developments of thin film lithium niobate face the challenging etching of metal-oxides. Therefore, the quest for a non-centrosymmetric material system, easy to fabricate and to scale up while maintaining its functionality is still ongoing. Here I will present our recent advances in top-down fabrication of lithium niobate devices and bottom-up assemblies of randomly oriented nanocrystals or sol-gel to produce nonlinear classical and quantum signals.

Monday, 29 January 2024

at Lise Meitner Lecture Hall at Universität Wien
Boltzmannngasse 5, 1090 Vienna, 1. OG

17:00 VCQ Student Talk by Oliver Diekmann

Two atoms in a fish-eye lens playing pingpong with a single photon

17:15 VCQ Colloquium talk by Rachel Grange

Host: Stefan Rotter

*****There will be drinks & snacks after the talk!*****

Zoom link: <https://vcq.quantum.at/colloquium-ws-23-24/>