



The **Vienna Center for Quantum Science and Technology VCQ**

invites you to a

COLLOQUIUM TALK

by

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Components, systems and other stuff for quantum satellites

In 2019, the nanosatellite called SpooQySat-1 was launched with an onboard entangled photon pair source. This was Singapore's pathfinder satellite for understanding how quantum technology could operate in low Earth orbit. The lessons gleaned from this mission has paved the way for more ambitious satellites due in late 2025 and early 2026, which will demonstrate space to ground communication. I will discuss our experience at the Singapore Centre for Quantum Technologies in developing the mission, and comment on some of the common concerns such as environmental temperature and radiation effects, and how these may be mitigated. I will also introduce a new type of entangled photon pair source built from silicon nanophotonic chips, and conclude with an outlook on Singapore's plan for quantum network research.

Wednesday, 27 November 2024

at Schrödinger Hörsaal, ESI, Boltzmannngasse 9, 1090 Vienna

17:00 Get-together with snacks

17:30 VCQ Student Talk by Daniel Kun

17:45 VCQ Colloquium Talk

Host: Philip Walther

For further information and a Zoom link please visit <https://vcq.quantum.at/colloquium-ws-24-25/>