



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

invites you to a

# COLLOQUIUM TALK

by

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## Distributed Quantum Computing as a Service

The exploitation of certification tools by end users represents a fundamental aspect of the development of quantum technologies as the hardware scales up beyond the regime of classical simulatability. Certifying quantum networks becomes even more crucial when the privacy of their users is exposed to malicious quantum nodes or servers as in the case of multi-client distributed blind quantum computing, where several clients delegate a joint private computation to remote quantum servers, such as federated quantum machine learning.

In such protocols, security must be provided not only by keeping data hidden but also by verifying that the server is correctly performing the requested computation while minimizing the hardware assumptions on the employed devices. In this talk we review recent progress to address the three key challenges of scalability, privacy, and integrity to pave the way for Distributed Quantum Computing as a service for all.

**Monday, 28 October 2024**

at Lise Meitner Lecture Hall at Universität Wien  
Boltzmann-gasse 5, 1090 Vienna, 1<sup>st</sup> floor

17:00 Get-together with snacks

17:30 VCQ Student Talk

17:45 VCQ Colloquium Talk

**Host: Borivoje Dakić**

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