



INSIGHT SEMINAR: Quantum Communications at Scale - An Industry Perspective

ANTIA LAMAS LINARES

October 24, 2023

15:00 to 16:00

Seminar Room

Abstract:

As quantum communications and networking increasingly become part of the conversation around real-world deployment of quantum technologies, it is worth looking into what some relevant real-world networks looks like. In this talk, I will describe some of the criteria that are often cited for practical deployments of quantum communication systems and how they fit into the reality of a hyperscaler. I will discuss how some commonly cited problems are largely irrelevant, while seemingly trivial issues become major barriers to scaling.

Biography:

Antia leads the AWS Center for Quantum Networking. She has been working in quantum communications and networking for over 20 years in academia, national labs, a

d industry. She did her PhD in Oxford building entanglement sources and was a founding PI of the Center for Quantum Technologies in Singapore. Before joining AWS, she was part of the emerging quantum technologies startup ecosystem as Chief Quantum Scientist of SpeQtra, a company launching small satellites with entanglement sources on board for quantum communications purposes. Antia's research work has centered around photonic implementations of quantum information protocols with an emphasis on entanglement production and security flaws in QKD systems. You can learn more about Antia at her [Amazon Science profile](#).

Hosted by: Prof. Dr. Antonio Acin and Prof. Dr. Valerio Pruneri