



**Graz Advanced School of Science**  
PHYSICS COLLOQUIUM OF THE UNIVERSITY OF GRAZ AND  
THE GRAZ UNIVERSITY OF TECHNOLOGY

*Ulrik Lund Andersen*

Technical University of Denmark

## **Optical quantum computing**

Quantum computing can be realized with numerous different hardware platforms and using different computational protocols. One highly promising strategy to foster scalability is to use a photonic platform combined with a measurement-induced quantum processing protocol where the computational gates are realized through optical measurements on a multi-partite entangled state. In this talk I will discuss our progress towards the construction of a universal and fault-tolerant measurement-based optical quantum computer.

**Date:** Tuesday, 12 October 16:15  
**Location:** <https://us02web.zoom.us/j/84543422155>  
**Host:** Peter Banzer, KFU

For a regularly updated colloquium program see: <https://www.if.tugraz.at/colloquium.html>