





The Vienna Doctoral Programme on Complex Quantum Systems invites you to a

## **Seminar Talk**

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## **Jonathan Dowling**

Louisiana State University, Baton Rouge, Louisiana

## Schrödinger's Web — The Race to Build the Quantum Internet

Over the past 20 years bright sources of entangled photons have led to a renaissance in quantum optical interferometry. These photon sources have been used to test the foundations of quantum mechanics and implement some of the spooky ideas associated with quantum entanglement such as quantum teleportation, quantum cryptography, quantum lithography, quantum computing logic gates, and sub-shot-noise optical interferometers. I will discuss some of these advances and the unification of optical quantum imaging, metrology, and information processing. I will end with quantum communications and networks and highlight advances particularly in China.

Monday, 20 November 2017, 16:30h get-together with coffee and snacks!

Lise Meitner Hörsaal, Strudlhofgasse 4, 1st floor, Vienna

The seminar talk will be preceded by a CoQuS Student talk at 17:00h by

## **Giulia Rubino**

University of Vienna
"Experimental Entanglement of Causal Orders"

Hosted by: Philip Walther



