



Einladung
zum
Seminar des Instituts für Quantenphysik

Prof. Dr. Ebrahim Karimi
University of Ottawa, CA

***Recent Advances in
Structured Quantum Waves***

Freitag, den 6. Juli 2018
15:00 Uhr
N24/252

Abstract:

The quantum mechanical principle of wave-particle duality is not limited to light and its constituent photons. Indeed, matter can also be made to exhibit wavelike behaviour, as dramatically demonstrated by numerous experiments in diffractive electron optics. Remarkably, the wavelike properties of matter suggest that the very same techniques used to structure beams of light can be applied to shaping matter waves.

In my talk, I will present the recent progress, challenges and development in structuring photon, electron and neutron beams. Their applications in different research fields such as high-dimensional quantum cryptography and materials science will also be the subject of my talk.