Mendel University in Brno

ÚCB

Intelligent NanoEngineering (iNANO)

DEPARTMENT OF CHEMISTRY AND BIOCHEMISTRY

Advanced Seminar Series

04.04.2025, 1:00 pm

Building K, Meeting room K01

třída Generála Píky 1999/5, Brno

Dr. Hadrien Robert

Institute De La Vision
Sorbonne University, France

INSTITUT DE LA VISION PARIS

Quantitative Phase Imaging for Nano-Object Characterization

The detection and characterization of nano-objects have become a major challenge in numerous domains ranging from fundamental research to health. Fluorescence imaging identifies objects but is limited by photobleaching and lacks quantitative measurement. By contrast, label-free techniques are more suitable for observing and characterizing nano-objects. Among these techniques, the characterization of nanoparticles with quantitative phase imaging (QPI) and interferometric scattering (iSCAT) microscope have become promising approaches thanks to their holographic nature allowing to directly probe a volume to finely characterize nano-objects.