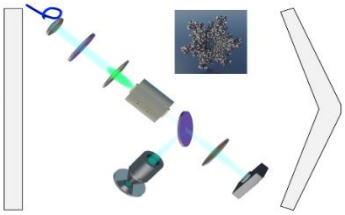

Master thesis available

Optical Near-field Electron Microscopy

Richard Feynman once asked for better microscopes to watch biology at work. Our *Quantum Imaging and Biophysics* group is working at the interface of microscopy, quantum physics and electron optics to develop new imaging techniques that offer increased sensitivity and resolution.

We are currently hiring a master student to work on an EU funded project that aims at establishing a new microscopy technique called Optical Near-field Electron Microscopy (www.ONEMicroscope.com). The technique combines light and electron optics in order to realize a non-invasive high-resolution microscope. In your master thesis you will design and build an optical setup that will later combined with the world's best low energy electron microscope. You will test your setup in a prototype arrangement that realizes a single-pixel ONEM prototype. You will be working in a team with a postdoc and a PhD student, as well as with international collaborators from the University of Leiden and the Czech Academy of Sciences.

We offer a cutting edge research program at the interface of physics and biology that offers plenty of room for your ideas. **You are** a highly curious and motivated student with hands-on mentality, who loves to work on new ideas. Skills in optics, electronics, and programming are of advantage.

For more details, please inquire with Thomas Juffmann (thomas.juffmann@univie.ac.at) as soon as possible. The starting date should be between February and June.

The *Quantum Imaging and Biophysics group* is affiliated both with the Faculty of Physics and the Max Perutz Labs at the University of Vienna.

Vienna BioCenter

universität wien
Faculty of Physics

MAX PERUTZ LABS VIENNA