Masterarbeiten zu vergeben
Master-positions available

We offer positions for research projects to students of physics and nanoengineering on an exciting topic using sophisticated experimental techniques:

**Mechanical, magnetic and transport properties of nanostructures (nanowires, nanoparticles and nanotubes) studied by in-situ Transmission Electron Microscopy (TEM)**

![TEM micrographs: (a) electromechanical vibration of an InAs nanowire excited by an alternating voltage; (b) Iron Oxide nanocubes chain formed between tungsten STM tip and gold substrate; (c) in-situ bending of ZnO nanowire with gold STM tip](image)

*In-situ* experiments combined with electron microscopy offer new possibility to study details of physical properties of nanoobjects. Besides a fascinating possibility to control the experiments visually transmission electron microscopy provides complete information about the atomic structure and morphology.

In the master thesis you will learn to use unique methods for sample preparation and investigations of atomistic structural details and mechanical, magnetic and transport properties.

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