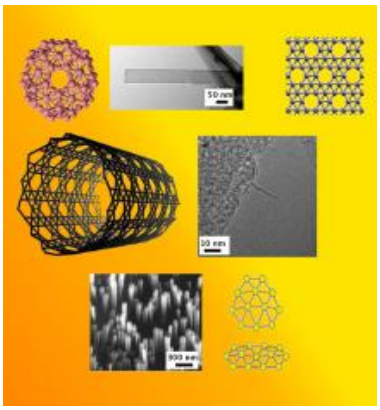
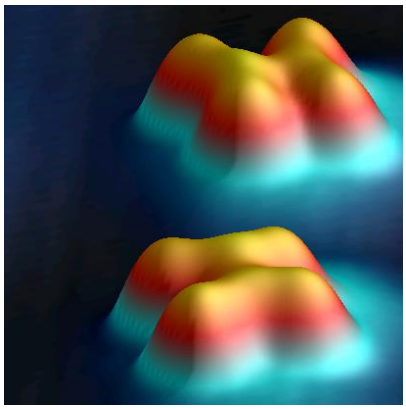
SoSe 2017 | LECTURE ANNOUNCEMENT

NANOSTRUCTURED MATERIALS

TIME Lecture: Tuesdays 2. DS (09.20 a.m. – 10.50 a.m.)
Exercise: Wednesdays 4. DS (1.00 p.m. – 2.30 p.m.)
Lab course: on appointments

START 04.04.2017

LOCATION **SCH/A216/H** (Lecture), **MOL/213/H** (Exercise)

LECTURERS Prof. Dr. G. Cuniberti / Dr. L. Baraban

LANGUAGE English

SUBJECT The course deals with the physical properties of nanostructured materials and their fabrication. Lab classes accompany the course. The following topics are discussed:

- scaling laws, mesoscopic systems, quantum effects
- bottom-up synthesis of the materials
- top-down nanostructuring via electron beam lithography, optical lithography, and scanning probe techniques
- density of states and electron transport in low-dimensional systems
- nanoelectronic devices, biosensors
- microfluidics and optofluidics