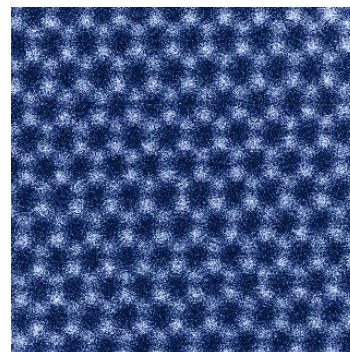


## **Pre- and Post-doctoral research positions in low-dimensional materials and high-resolution microscopy/spectroscopy**

Applications are invited to join the research cluster “Complex Nanoscale Matter“ of The Faculty of Physics at the University of Vienna. We seek for highly motivated and independent candidates for



**6 PhD positions (3 years) and**

**3 Post-doc positions**

Our research groups study the fundamental physics of novel low-dimensional materials, in particular graphene, non-carbon 2-D systems and carbon nanotubes. We are interested in controlling their formation and understanding atomic structural modifications to make use of the rich physics behind their unique properties. We employ and develop cutting edge microscopic and spectroscopic analysis, and we explore new ways to manipulate pristine and hybrid materials at the atomic level.

We seek candidates with strong experimental skills and who are able to tackle interdisciplinary challenges that will involve:

- High-resolution (aberration-corrected) scanning transmission electron microscopy of low-dimensional, radiation sensitive materials
- Scanning probe microscopy analysis and manipulation of 2D materials
- Novel routes in synthesis and modification/functionalization of nano-carbons and inorganic 2-D systems
- Spectroscopic and micro-spectroscopic studies of these materials using in-situ tools and large scale facilities
- Strong interaction with theory and international co-operation partners including laboratory visits worldwide.

These positions are available within the groups of Prof. Jannik Meyer, Prof. Paola Ayala and Prof. Thomas Pichler. For further information, see <http://physnano.univie.ac.at/research/complex/> or <http://epm.univie.ac.at/>.

The prerequisite for PhD positions is a completed Master degree or equivalent qualification. Postdocs with a background in materials science, physics, chemistry or engineering are sought. We expect self-motivated performance-oriented work, a good amount of team spirit, and excellent analytical capabilities. Experience with the following topics is desired (especially for the post-doc positions): materials synthesis, transmission electron microscopy, scanning probe microscopy, UHV technology, lithographic methods, electronic measurements and simulation of electromagnetic and/or structural molecular properties, programming of complex experimental measurements.

Applications should be sent directly by e-mail ([CNM\\_positions@univie.ac.at](mailto:CNM_positions@univie.ac.at)) including a Curriculum Vitae, list of publications, and academic transcripts of the bachelor and master studies. Review of candidates will begin 1.12.2013 and will continue until all positions are filled.