Open position: Marie-Curie training Network in Optomechanics (OMT)

We are currently offering a PhD position in the context of the ITN Marie Curie International Training Network OMT on optomechanics.

The ETN on opto-mechanical technologies will perform research on how to create new technologies based on opto-mechanical physics, which exploits light-matter interactions in nano-opto- and electromechanical devices, and aims to advance the state of the art in the field by addressing several new research directions. If you are curious about new quantum technologies, come and join us in our explorations at the intersection of nanophysics and quantum optics.

The successful candidate will explore integrated photonic structures for high-performance optomechanical devices based on optical levitation. The activities will locally be integrated in the ERC project QLev4G hosted at the University of Vienna. In addition, the candidate will be part of the OMT network comprising partners from 14 European research institutions, and benefit from continuous exchange and collaboration. Furthermore, participation in innovative training modules, including a series of hands-on workshops, international conferences, and outreach activities are included in the OMT project. Marie Curie Fellows enjoy the benefits of full social security, competitive monthly living, mobility and family allowance.

The ideal candidate must hold a master degree in physics (or equivalent). According to the ETN mobility rule, the candidate must not have resided, worked or studied in Austria for more than 12 months in the 3 years prior to the recruitment. Besides excellent experimental and theoretical skills as well as a good team spirit, cleanroom experience, or prior experience with nano- or cavity optomechanical systems are desirable. Particularly female candidates are encouraged to apply.

Research in the Aspelmeyer group focuses on the investigation of quantum effects of nano- and microscopic systems and their implications for the foundations and applications of quantum physics. We apply and develop quantum optics methods to achieve control over motional states of these systems in the quantum regime. From a fundamental perspective, our goal is to gain access to a completely new parameter regime for experimental physics with respect to both size and complexity. We are particularly interested in the perspectives for studying the interface between quantum physics and gravity using quantum optical control over the motion of increasingly massive solids. From an application perspective we are investigating nano- and micromechanical systems in novel sensing and transducing architectures, for example as photon-phonon interface for quantum information processing or as inertial sensor for measuring weak gravitational forces.

To apply, please send an email to aspelmeyer-office@univie.ac.at by **28.2.2017**. Your application should include a letter emphasizing your background and scientific interest as well as qualifications and your motivation to apply, a detailed CV, a list of publications, the contact details of at least to references, as well as the academic transcripts of BSc and MSc grades.