



Call for 2014 DESY-ONACPR Fellowship Applicants

Research Laboratory: DESY
Division/Group: FS-CFEL-1/CMI
Supervising scientist: Dr. Prof. Jochen Küpper
Email/Phone: jochen.kuepper@desy.de +49-40-8998-6330
Research Field: Physics, Biophysics
Position: Postdoctoral Research in AMO Physics

Research Area:

In a bottom-up approach we are performing imaging experiments on controlled molecular samples in order to obtain time-resolved 3D images, so called “molecular movies”, without crystallography. These experiments aim at a detailed understanding of the structure function relationship in physics, chemistry and biology. They rely on the preparation of well-controlled samples of complex molecules and we exploit specific interactions with electric and laser fields to spatially separate shapes, structural isomers, and quantum states of the molecular species and to fix the molecules in space. In this project we will extend the alignment and orientation of molecules in space to arbitrarily complex, unsymmetric and large, molecules. The project is highly interdisciplinary and has experimental as well as theoretical aspects.
See <http://desy.cfel.de/cid/cmi> for details on our research.

Specific Requirements:

1. Highly motivated
2. Strong research ability and team-work spirit
3. Good communication skills in scientific English
4. Background in experimental and/or theoretical AMO physics; strong experience with lasers, ultra-high vacuum, and modern laboratory electronics.

Work Place: Hamburg
Earliest Start: September 2014
Language
Requirement: proficiency in scientific and casual English (spoken and written), please note that we require for all candidates proven records of English, e.g. CAE certificate or other certificate with the same level.
Application Code: DESY/2014/3
Further Remarks: