



PhD Position

A PhD position (*Early Stage Researcher Fellowship*) is available in the theory group *Modern Optics* at the *Department of Physics* of the *Humboldt University Berlin (Germany)* in the field of laser-matter interaction, molecular physics, and attosecond science. The specific research topic is the theoretical investigation of molecules in ultrashort intense laser pulses. For this purpose, the methods and codes developed in the group for describing the interaction of lasers with molecules (fully quantum mechanically) should be extended and applied. One of the goals is an investigation whether it is possible to follow electronic and/or nuclear dynamics in chemical reactions on the sub-femtosecond time scale.

The position is funded within the European *Initial Training Network (ITN) CORINF* that comprises about 15 research groups distributed over Europe. The network provides training schools and regular meetings as well as funding for attending international workshops and conferences. The student is also encouraged to perform research stays at other nodes of the network.

Requirements: Qualified candidates should possess an excellent masters or diploma degree in theoretical physics or theoretical chemistry. A solid background in quantum mechanics is a prerequisite, programming experience would be advantageous. Good command of the English language is required, knowledge of German beneficial, but not required. Most importantly, however, the candidate should be highly motivated to enter an interesting and challenging project. Since the network, the EU, and the Humboldt University are very interested to increase the number of female scientists, women are especially encouraged to apply.

Eligibility: Due to this project being part of a Marie Curie Initial Training Network, strict eligibility rules apply. Applicants must not be nationals of the state in which the project and research is to take place — in this case Germany. Applicants also must not have lived, worked, or studied in Germany for more than 12 months in the last 3 years. To qualify as *Early Stage Researcher* applicants must not already have more than 4 years research experience, measured from the time a first degree has been obtained.

Location: The location of the research group is in Berlin, Germany's capital. More information on the research group may be found at <http://amo.physik.hu-berlin.de>.

Application: Applications should include a curriculum vitae, copies of relevant certificates or diplomas, and the names and addresses of at least two academic reference persons. The material should be sent by e-mail to Alejandro.Saenz@physik.hu-berlin.de. Applications sent by January 30, 2012 are ensured full consideration, but applications are accepted until the position is filled.