
POSTDOC IN EXPERIMENTAL ATTOSECOND PHYSICS

BASED AT THE CEA SACLAY, FRANCE

We are looking for a post-doctoral researcher to join, from October 2015 on, a common effort of CEA Saclay and the very nearby Laboratoire d'Optique Appliquée (LOA) in applying laser waves with shaped optical cycles to the control of strong-field dynamics in atoms and molecules (CEA) and of relativistic laser-plasma interactions (LOA).

The Postdoc will be based in the Attophysics group of CEA to be in charge of the implementation of an optical setup for the shaping of powerful laser waveforms in order to drive the generation of *isolated* attosecond pulses in noble gases with very competitive pulse energy. This setup will be driven by a state-of-art high-energy 1-kHz Ti:sapphire laser amplifier run by a dedicated laser group at the ATTOLAB facility. These attosecond XUV pulses will be characterized and applied in the existing attosecond beamline.

Saclay provides an excellent scientific environment with long tradition and leading expertise in intense laser-matter interactions, especially in high harmonic and attosecond pulse generation, both in theory and experiments. Its geographical location in the suburbs of Paris and the agglomeration of prestigious academic institutions like Ecole Polytechnique, Institut d'Optique, the SOLEIL synchrotron, CEA, CNRS, etc., recently consolidated as "Université Paris-Saclay", allows frequent and fruitful exchanges. The brand new state-of-the-art ATTOLAB facility provides privileged access to most competitive lasers and attosecond beamlines.

THE CANDIDATE:

- must have a PhD degree in Physics, awarded *after* 1 Oct. 2011,
- should have research experience in areas related to experimental ultrafast optics,
- should have a strong inclination to experimental work,
- ideally has research experience related to strong-field and attosecond physics,
- ideally has experience with Optical Parametric Amplifiers (OPA).

This position carries a competitive gross salary of 3300 – 3700 € per month depending on the experience of the candidate, for a renewable 12-month period.

Interested candidates should send a CV with the contact information of two references to

✉ stefan.haessler@ensta-paristech.fr

☎ +33(0)1 69 31 97 85