

Researcher in attosecond science at ATTOLab-Orme

Job description

You will join the AttoPhysics group as a permanent researcher based at the state-of-the-art ATTOLab-Orme Laboratory. You will develop a high profile experimental program in attoscience in the gas phase (at least 60% of the time); you will be in charge of the SE1 attosecond beamline, that includes a 1 kHz secondary source of attosecond XUV radiation and experimental end-stations for the study of ultrafast dynamics in the gas phase (MBES and VMIS spectrometers).

Your tasks

- Develop a high-level experimental program in attoscience in the gas phase;
- Design projects and write the corresponding funding applications in response to competitive calls from funding agencies;
- Communicate scientific results at the highest level, in scientific journals and international conferences;
- Contribute, in close interaction with the laser team, to the developments of the SE1 beamline, from the laser and atto sources to the experimental end-stations, in order to expand / enhance its capabilities;
- Participate in user support program of the facility for the beamtime part open to external users, and in the operation of the FAB1-10 lasers in support of the laser team if needed;
- Supervise trainees, doctoral students and postdoctoral fellows.

Your profile

- PhD degree in laser-matter interaction, ultrafast optics or laser physics;
- Solid experimental expertise in at least two of: high harmonic generation in gases/solids, ultrafast dynamics in the gas phase, atomic and molecular spectroscopy;
- Mastery of advanced experimental techniques in attosecond science;
- High profile track record, with experience of typically 3-10 years in the field;
- Capabilities to work in a team & excellent communication skills;
- Conceptual, experimental and technological creativity;
- Fluency in English (spoken and written).

Benefits

- Competitive salary based on experience;
- Health, pension and unemployment securities included
- Benefits from CEA (sports, housing, family, holiday and public transportation discount...)

Environment

- ATTOLab-Orme is part of the French consortium ATTOLab (<http://attolab.fr/>) bringing together 9 groups with interdisciplinary expertise in intense femtosecond lasers, attoscience, ultrafast dynamics in gas phase and condensed matter.
- New building inaugurated in 2016 and state-of-the-art fully operational lab.
- Two Ti:Sa lasers with 1 kHz/15W and 10 kHz/20W beamlines, 23 fs duration and CEP stabilization; high-energy postcompression and OPA;
- Multinational group of ~20 scientists (~10 postdocs and students) with a high level of laser/optics and technical support;
- 30-year expertise in intense laser-matter interaction with a number of groundbreaking discoveries (ATI, HHG, atto pulse trains, atto imaging and control, ...)
- Lab located at Paris-Saclay University (Paris suburb - 45 min public transportation to historic center of Paris). High concentration of scientists and a lot to enjoy outside!

Application/selection procedure

Recruitment based on an open international competition.

Please apply online via the CEA career website (<https://www.emploi.cea.fr/offre-de-emploi/liste-offres.aspx>) and by emailing a complete file to jobs.lidyl@cea.fr.

The application file will contain:

- a CV;
- a comprehensive record of professional achievements (publications, fellowships, awards,...) including a short description of main personal accomplishments (conceptual, technical);
- a cover letter highlighting the motivations for applying to this position;
- a research project (10 pages maximum) describing in particular how it would strengthen and/or complement the programs of the AttoPhysics group on photoionization dynamics in gas phase;
- contact data of three professional references.

Application deadline: 15/11/2020 - 23:59 CEST.

A limited number of candidates will be invited for a panel interview in November-December 2020.

