

Research positions (PhD studies & Post-Doctoral level) in Atom Optics and Ultracold Atoms

Institut d'Optique is a Centre located in the Paris area, which performs research, education and technological transfer activities in Optics, Atomic Physics and Quantum Information, at the highest international level. We offer **PhD** and **Post-Doctoral positions** to well-qualified, highly-motivated and dynamic young scientists in Theoretical Quantum Physics. The successful applicants will be working in the *Quantum Atomic Gases – theory* team lead by **Dr. Laurent Sanchez-Palencia**, within the framework of the European Research Council program on Disordered Quantum Gases.

The project aims at developing theoretical studies of *Disordered Quantum Gases*, which is one of the most active fields in Quantum Physics. Joint experimental and theoretical work recently lead to spectacular results and many challenging questions are open. Here, we will focus on a major issue: the interplay of disorder and interactions. The project lies at the forefront of modern research in both Ultracold Atoms and Condensed-Matter physics and includes close collaboration with the world-leading experimental group of **Prof. Alain Aspect**. The candidates are thus expected to have interest in interdisciplinary research and possibly in collaboration with experimentalists.

Eligibility

There is no restriction of citizenship. Candidates to a **PhD position** must hold an internationally-recognized Master degree (or equivalent degree) in Theoretical Physics, Atomic Physics, Quantum Optics or Condensed-Matter Physics. Candidates for a **Post-Doctoral position** must hold an internationally-recognized PhD degree (or schedule their PhD defense within a couple of months), in one of the above fields. Earlier experience in the field of Ultracold Atoms, ability to work well in team and/or taste for collaborations with experimentalists will be welcome.

Conditions

PhD positions are offered for 3 years. **Post-Doctoral positions** are offered for 1-year periods, renewable after positive evaluation by the Team Leader, Dr. Laurent Sanchez-Palencia.

Application procedure

Candidates should send their application by e-mail to Dr. Laurent Sanchez-Palencia (lsp@insituptique.fr), including:

- a Curriculum Vitae, including (date of birth, full address, e-mail address and publication list)
- a motivation letter (no more than one or two pages)
- a scanned copy of their academic marks with indication of ranking (for PhD positions) and degrees (for PhD and postdoctoral positions)
- a list of two or three potential referees (with e-mail address).

Deadlines

The project starts in January 2011. The call will remain open until suitable candidates are selected.