

# CURRICULUM VITAE

## Hélène PERRIN

CNRS Senior researcher

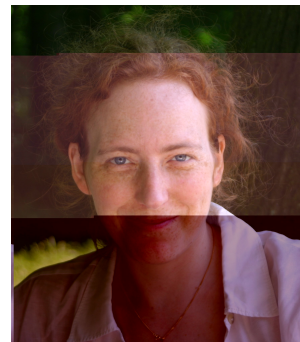
Laboratoire de physique des lasers

Université Paris 13 Sorbonne Paris Cité

<http://www-lpl.univ-paris13.fr/bec>

34 publications in int. journals, h=13

Researcher ID A-3428-2013



**Research topics:** Experiments and numerical simulations in atomic physics and optics. Laser cooling, Bose-Einstein condensation, quantum gases in reduced dimensions, superfluidity; traps for ultra cold atoms, adiabatic potentials.

## Curriculum

1991-1995: Education: École Polytechnique, Palaiseau and École normale supérieure (ENS), Paris.

1995-1998: PhD at ENS Paris directed by Christophe Salomon in the group of Claude Cohen-Tannoudji: *Cooling of cesium atoms in a far off resonance trap* (with honours).

1998-1999: Post-doc at CEA-Saclay with Christian Glattli, on two-dimensional electron gases.

1999-2002: Junior CNRS researcher at Paris 13 University.

2003-: Senior CNRS researcher.

2008: Habilitation defence.

2012-: Group leader of the BEC team in Paris 13 University.

**Award** Prize of the iXcore foundation (2009).

**Membership** French Physical Society, French Optical Society, Women in Science association.

## Responsibilities

*Current:*

- International Advisory Committee of the ICAP conference (since 2012).
- Executive committee of nanoK/IFRAF, head of the Quantum Gases division (with Antoine Browaeys)

- Expert for various organizations (Univ. Paris-Sud, UPMC, Fondation L'Oréal, etc.)
- Organization of the Les Houches predoc schools dedicated to Cold Atoms (since 2013), with Philippe Verkerk and Jook Walraven.
- Referee for Nature Physics, Physical Review Letters, Physical Review A, Journal of Physics B, European Physical Journal D, Oxford University Press...

*Past:*

- Member of the CNRS national evaluation committee (2006-2008)
- Organization of the Spring school *Quantum Gases in Low Dimensions* at Houches in 2003. Edition of the book.
- Co-chair of the ICAP 2012 conference in Palaiseau, see <http://www-lpl.univ-paris13.fr/icap2012>

**Outreach:**

- International year of physics 2005 (radio...)
- Conferences for the 50 years of lasers 2010, see [www-lpl.univ-paris13.fr/bec/BEC/Team\\_Helene.htm](http://www-lpl.univ-paris13.fr/bec/BEC/Team_Helene.htm)
- Interview in a movie on cold atoms *La jeunesse des atomes froids* (in French), 2006
- Exhibitions and conferences for pupils in secondary school or high school
- contribution in the book *Le plus grand des hasards, surprises quantiques* by Jean-François Dars and Anne Papillault

**Teaching**

- Laser cooling and trapping, les Houches, for new PhD students
- Lecture series on adiabatic potentials at Les Houches (2013)
- Lecture series on low dimensional quantum gases in Vienna (2009)
- Lecturing at the Master level at ENS and UPMC on ultra cold atoms, quantum gases, and quantum optics