

# CURRICULUM VITAE

## Hélène PERRIN

born 13 June 1972 in Paris

Research Director at CNRS

Laboratoire de physique des lasers

Sorbonne Paris Nord University (former Paris 13 University)

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

45 scientific publications

about 1000 citations, h-index=18 (WoS)

Researcher ID A-3428-2013



Photo: Olivier Ezratty pour [www.qfdn.net](http://www.qfdn.net)

**Research topics:** Experimental and theoretical atomic physics. Laser cooling, ultracold atom trapping, Bose-Einstein condensation, low dimensional quantum gases, superfluidity.

## Curriculum

- 1991-1995: Formation: Polytechnique school in Palaiseau; Master of quantum physics at École normale supérieure (ENS Paris) with honors.
- 1995-1998: PhD at ENS, in the group of Claude Cohen-Tannoudji, Paris (directed by C. Salomon): *Cooling caesium atoms confined in a far detuned optical trap*. Defended with highest grade.
- 1999: Post-doc at CEA with C. Glattli: *Noise in two-dimensional electron gases*.
- 2000-: CNRS researcher, Laser Physics Laboratory at Paris 13 University (France).
- Dec. 2008: Habilitation thesis.
- Since 2012: head of the BEC group (about 10 people).
- Since 2017: CNRS Director.
- Since 2019: Deputy director of LPL.

**Prize** Prize of the iXcore foundation for research (2009).

## Membership and responsibilities

- Member of the board of AMOP division of EPS since 2016. Scientific committee of ECAMP conference.
- Member of the scientific council of the Les Houches Physics school.
- French Physical Society, French Optical Society, Women & Science association.
- International Advisory Committee of the International Conference on Atomic Physics (ICAP) since 2012.
- Executive committee of the SIRTEQ regional network, responsible for the Quantum Simulation division (with Pascal Simon) since 2017.
- Executive committee of a French national network on cold atoms (*GDR atomes froids*).

## Overview of scientific production

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- 45 referred articles ( $\sim$  1000 citations according to Web of science)
- 3 book chapters
- 2 books edited
- 18 invited conferences

## Conference organization

- Co-chair of ICAP 2012 in Palaiseau, with Philippe Grangier and Michèle Leduc. The conference gathered 1000 participants all over the world.
- Co-organizer of 5 two-week international physics schools in Les Houches.
- Organization of numerous workshops.

## Edition and expertise

- Scientific editor of Advances in Atomic, Molecular and Optical Physics with Susanne Yelin and Louis DiMauro.
- Expert for the National evaluation agency of laboratories (HCERES).
- Expert for various funding agencies (Paris-Sud and UPMC Universities, Fondation L'Oréal, etc.) or hiring committees (CNRS, Universities all over France).
- Referee for Nature Physics, Physical Review Letters, Physical Review A, Journal of Physics B, European Physical Journal D, Oxford University Press...

## Teaching and outreach

- Supervision of 8 PhD projects (5 already defended).
- Several lecture series at various international les Houches physics schools (laser cooling, optical lattices, Bose-Einstein condensation, new traps for quantum gases...).
- Lecture series in Vienna (Austria) on Low dimensional quantum gases (2009), in Natal (Brazil) on BEC, adiabatic potentials and superfluid dynamics (2019) and in Okinawa (Japan) on Laser cooling, BEC and superfluid dynamics (2019).
- Teaching at the master level in Paris, at ENS, Paris-Diderot and Sorbonne University (cold atoms, quantum optics, quantum computing).
- Participation to  $> 40$  PhD or Habilitation committees ( $> 25$  as main referee) in France or abroad.
- Translation into French of a textbook by C. Cohen-Tannoudji and D. Guéry-Odelin.
- Numerous outreach contributions: articles, interviews, books, conferences...