Curriculum Vitae

Christophe SALOMON

Born 23 11 1953 Nationality: French. Married, 3 children e-mail: salomon [at]lkb.ens.fr

Current position: Research Director at CNRS (LKB, ENS, FR)

1) Scientific Activity

Present -1997 Head of the cold Fermi gas group at Ecole Normale Supérieure Principal Investigator of the ACES/PHARAO space clock Mission.

2000 1rst class Research Director at CNRS. Quantum gases and cold atom clocks.

1990 2nd class Research Director at CNRS. Laser manipulation of atoms and cold atom clocks.

1989 Guest scientist at University of Sao Carlos (Brazil), 7 weeks.

1986 Entrance in Laboratoire Kastler Brossel (ENS). Laser cooling of atoms.

1985 Post-doctoral stay at JILA, (USA) with Dr J. Hall: ultra-stable lasers and laser cooling of atoms.

1984 CR1 at CNRS. PhD thesis: Ramsey fringes and high resolution spectroscopy in the infrared.

1980 Entrance in CNRS: CR2 at laboratoire de physique des lasers. (Paris-North University).

1979 3rd Cycle thesis: high resolution saturation spectroscopy with waveguide CO₂ lasers.

1978 Entrance in Laboratoire de Physique des Lasers (Paris-North University).

1977 DEA: Quantum Optics, Orsay University.

76-73 Engineering school: Ecole Centrale des Arts et Manufactures de Paris.

2) Scientific Production since 1978

Refereed Journal Publications: 97 Conference Proceedings: 69 Invited conferences: 168

Book Chapter: 2. Book Editor: 2.

3) Other Professional experiences

Principal Investigator for the PHARAO cold atom space clock developed by CNES since 1992. Principal investigator for the European mission ACES, atomic Clock Ensemble in Space, since 1997. Member of the ESA Fundamental Physics Advisory Group 2000-2004.

Member of the CNES fundamental physics working group 1993-2006. Chairman: 1993-1995.

Member of several international conference scientific committees including European Time and Frequency Forum, Frequency Standards and Metrology Symposium, Laser Spectroscopy

Conferences, International Conference on Atomic Physics, Conference on Precision Electromagnetic Measurements, European Quantum electronics Conference.

Member of several evaluation committees in France and Europe (TCRC/TR 6042, Germany), SFB 015 (Austria), of the Max Planck Institute for Quantum Optics (Garching, DE) since 2006.

Member of the Scientific and Technical Advisory Committee of VIRGO since 2006.

Member of the EURAMET Research Council since 2007.

Member of the LNE Time and Frequency Committee since 2005.

Member of the "Science and Metrologie" committee of the French Académie of Sciences since 2006. Co-editor of Europhysics Letters (1989-2003)

Member of editorial board of J. Phys B (since 2004).

Member of the European Physical Society.

Member of the French Physical Society.

4) Conference and workshop organization since 1996

Organizer of Les Houches international conference on Bose-Einstein condensation (1996) with Yvan Castin (March 1996).

Organizer of ACES workshop, June 1998 (Neuchatel, switwerland) with P. Thomann.

Organizer of International workshop on Ultracold Fermi Gases with S. Stringari and R. Combescot (4-6 March 2004).

Organizer of the ACES workshop (ESA-ESTEC October 2005) with L. Cacciapuoti.

Organizer of the International Workshop on "Advances in Precision tests and experimental gravitation in space" with L. Cacciapuoti, G. Tino, and W. Ertmer (Sept-28-30, 2006).

Organizer of the International School of Physics "Enrico Fermi", Ultracold Fermi gases, Course CLXIV, Varenna, 20-30 June 2006, with M. Inguscio and W. Ketterle.

5) Lectures in international schools

- 1989 Enrico Fermi School on metrology. Laser cooling of atoms and ion trapping for frequency standards (3 lectures).
- 1998 Les Houches : laser manipulation of atoms (4 lectures).
- 1999 Solbacka (Sweden). Laser manipulation of atoms and Bose-Einstein Condensation (7 lectures).
- 2003 Les Houches school on quantum gases in low dimensions (1 lecture on solitons).
- 2003 BIPM International school on Metrology (Sèvres, FR). 3 lectures on cold atoms, Bose-Einstein condensation, and clocks.
- 2006 Int. School on experimental gravitation in Space Sept 25-27, 2006 (4 lectures on atom interferometry, Bose –Einstein condensation and clocks.
- 2007 Varenna. Enrico Fermi school on "Atom Optics and Space Physics", Course CLXVIII, 2 lectures on cold atom clocks on Earth and in Space.
- 2007 Onassis Foundation: the 2007 Lectures in Physics: Bose-Einstein condensation, Heraklion, Crete. 2 Lectures on solitons and Fermi gases.

6) Prizes, Honors

- 2005 "Three physicists" prize (FR). Cold atoms and quantum gases
- 2000 Mergier-Bourdeix grand Prize of the French Academy of Sciences. Cold atom research.
- 1993 European Time and Frequency Prize: fountain clocks.
- 1993 Philip-Morris Prize: cold atom clocks.
- 1988 Science et Défense Young Researcher Prize

7) PhD and post-doc supervision

Since 1989 supervision of 25 PhD students, and 15 post-docs or scientific visitors.