

Curriculum Vitae –June 2010

Christophe SALOMON

Age: 56

Nationality: French

Married, 3 children

Current position: Research Director at CNRS (ENS, France)

Scientific Activity

- Present-2008 Head of the cold Fermi gas group at Ecole Normale Supérieure.
- 1997-2008 Head of the cold atom group at ENS with Jean Dalibard
- Present -1997 Principal Investigator for the ACES/PHARAO space clock Mission.
- 2000 1st 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-Doct. at JILA, (USA) Dr J. Hall: ultra-stable lasers and laser cooling of atoms.
- 1984 CR1 at CNRS. PhD: Ramsey fringes and high resolution spectroscopy in the infrared.
- 1980 Entrance in CNRS: CR2 (Research Associate) at laboratoire de physique des lasers.
- 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. Mention B.
- 1973-76 Engineering school: Ecole Centrale des Arts et Manufactures de Paris (France).

Scientific Production

Refereed Journal Publications: 109. Conference Proceedings: 73. Invited conferences: 192.

Book Chapter: 2. Book Editor: 2.

h-index: 42. More than 6700 citations in ISI web of Science

Other Professional experiences

Since 1992: Principal Investigator for the PHARAO cold atom space clock developed by CNES.

Since 1997 : Principal investigator for the European mission ACES, atomic Clock Ensemble in Space.

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 Conference, International Conference on Atomic Physics, Conference on Precision Electromagnetic Measurements, EQEC.

Member of several evaluation committees in France and Europe (TCRC/TR 6042, DE), SFB 015 (AT), 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 "Science and Metrologie" committee of the French Académie of Sciences.

Member of the "comité de la métrologie » (since 2009).

Co-editor of Europhysics Letters (1989-2003).

Member of Editorial board of J. Phys B (2004-2009).

Member of the European Physical Society. Member of the French Physical Society.

Conference and workshop organization since 1996

- Organizer of ACES workshop, June 1998 (Neuchatel, Switzerland) with P. Thomann.
- Organizer of an international conference on Bose-Einstein condensation (1996) with Yvan Castin (Les Houches, FR, April 1996).
- Organizer of the International workshop on Ultracold Fermi Gases with S. Stringari and R. Combescot (Levico, IT, 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 (Firenze, IT, Sept-28-30, 2006).
- Organizer of the International School of Physics "Enrico Fermi", Ultracold Fermi gases, Course CLXIV, Varenna, IT, 20-30 June 2006, with M. Inguscio and W. Ketterle.

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 Int. Summer 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 Enrico Fermi school on Quantum Engineering in Space. 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.
- 2010 University of Lausanne, 4 lectures on Fundamental Physics in Space and the ACES Mission

Prizes, Honors

- 2008 ERC advanced Research Grant laureate
- 2005 "Three physicists" prize (FR). Cold atoms and quantum gases.
- 2000 Mergier-Bourdeix Grand Prize of the French Academy of Sciences.
- 1993 European Time and Frequency Prize: fountain clocks.
- 1993 Philip-Morris Prize: cold atom clocks.
- 1988 Science et Defense Young Researcher Prize.

Funding ID

- Since 1989, Responsible of 30 research contracts with CNRS, French Ministry of research (2), DRET (5), CNES (14), ESA (1), BNM (2), NEDO (Japan)(1), Ile de France Region (2), and UE (3). Regular CNRS and ENS funding is 40 keuros/year.
- FABIOLA (ANR, France, 2006-2008). Fermions and bosons in optical lattices: 117 keuros;
- GASCOR (ANR, FR, 2005-2008): Correlated quantum gases, 71 keuros
- IFRAF (Region Ile de France, 2006-2008): Cold Fermi gases, 185 keuros
- Euroquam FerMix (ESF, CNRS funds, 2007-2009) Mixtures of Fermi gases: 75 keuros
- SCALA (UE, 2008-2009): Quantum simulation with Fermi gases, 31 keuros.
- FERLODIM (ERC), 2.2 M€(2009-2013)