Carlo Sirtori CURRICULUM VITAE

Carlo SIRTORI
Ecole Normale Supérieure
Laboratoire de Physique de l'Ecole Normale Supérieure – UMR 8023
24 rue Lhomond, 75231 Paris cedex 05, France
Tel.:

Date and place of birth:
Nationality: Italian
Languages: Italian (mother tongue), fluent in English and French, good knowledge of Spanish
Marital status:

SCIENTIFIC A***ND PROFESSIONAL CAREER***

October 2018 – present: Ecole Normale Supérieure, Paris

- Professor of Physics (Full professor Exceptional class)
- Chair holder of the "ENS-THALES chair"
- Visiting Professor Nanyang Technological University, Singapore, (since 2015)
- Member of the Board of Administrators "Fondation Diderot"
- Member of the Board of Administrators of the "Université Sorbonne Paris Cité"
- Member of the "Institut Universitaire de France"
- Leader of the research group "Quantum Physics and Devices"
- Expert for the European Community in the field of: *nano-technologies* and *quantum computing*
- Member of the scientific panel for the French Defence Agency (ASTRID)
- Member of the "Commissione Dipartimenti di Eccellenza" for the Italian Minister of Education

September 2002 – October 2018: University Paris-Diderot, Paris

- Professor of Physics (Full professor Ex2)
- Director of the Department "Matériaux et Phénomènes Quantiques"
- Member of the Board of Administrators of the University Paris-Diderot
- Awarded of an ERC Senior Grant (2010)
- President of the Institute DIAMON (Advanced Microwave Optoelectronic Nano-metric Devices)
- Vice President for the "Technological Transfer" at the University Paris Diderot (until 06 / 2011)

September 2002 – December 2007: Consultant for THALES Research & Technology (TRT)

- Senior consultant for TRT, in the field of infrared devices and optoelectronic components.

March 2000 – September 2002: THALES Research & Technology (Former "Laboratoire Central de Recherches de THOMSON-CSF"), France

- Head of the "Semiconductor Lasers Laboratory"
- Expert for the European Community in the field of: *nano-technologies* et *quantum computing*

March 1997 – March 2000: Laboratoire Central de Recherches de Thomson-CSF, France

- Principal Investigator, coordinator of the quantum cascade lasers activity

January 1994 – February 1997: Bell Laboratories, Lucent Technologies, Murray Hill, USA

- Principal Investigator, research on quantum cascade laser activity in the 8 - 12µm range

April 1990 – December 1993: Bell Laboratories, AT&T, Murray Hill, USA

- Post-doctoral position, research on semiconductor quantum structures

EDUCATION

April 2001: "Habilitation à diriger des recherches", University of Montpellier II

March 1990: Doctor degree in Physics, University of Milan, Italy. Title of the thesis: "Study of crystalline and amorphous silicon by ultra-fast spectroscopic techniques"
1988 - 1990: Thesis work at the EE department of the University of Pavia, Italy
1984 - 1988: University of Milan, Italy
July 1984: Diploma "Maturità Scientifica"

PUBLICATIONS AND CONFERENCES

- More than 250 articles in international peer reviewed journals
- 120 invited presentations at international conferences
- 24 patents
- h index = 56, ~14000 citations (Web of Science); h index = 69; ~21000 citations (Google Scholar)

TEACHING AND TUTORING

Since my arrival in France in 1997 I had been tutoring:
- 20 PhD students, 16 have already obtained their PhD, 4 are with my group
- 16 post-docs

At present I am teaching the following classes:
- Quantum devices (M2)
- Quantum Optoelectronics (M2)
- Semiconductor devices physics at (M1)
- Electromagnetism

PRIZES, AWARDS

Aug. 2017 **Prix Charpak-Ritz** of the French and Suisse Physical Societies for his remarkable work able to associate investigations of fundamental quantum properties and development practical devices.
Aug. 2008 **Quantum Device Award** of the International Symposium on Compound Semiconductors sponsored by the America Physical Society.
Sept. 2003 **Prize Fresnel – De Gramont** of the French Optical Society (SFO), for outstanding contributions in the field of optics and optoelectronics.
Dec. 2002 **Medaille Blondel** of the "Société de l'Electricité, de l'Electronique et des technologies de l'information et de la communication" (SEE), for outstanding contributions in the field of semiconductor physics and technology.
June 2002 **Fresnel Prize** of the European Physical Society (EPS), for major contributions in the field of unipolar optoelectronics.
Oct. 1995 **Electronics Letters Premium**, for the article: "Quantum Cascade Laser: an intersubband-semiconductor laser operating above liquid nitrogen temperature".
Mars 1995 **AAAS Newcomb Cleveland Prize** for the best article, letter or brief reports in Science for the year 1994 "Quantum Cascade Laser"
Nov. 1994 **Popular Science Award** for one of the best "100 inventions in 1994".

RESEARCH CONTRACTS and GRANTS

In 2010 I was awarded of an **ERC Senior Grant**. Since my arrival in France, I took part in **15 European contracts** (including 4 as coordinator). At the University I took part and coordinated **17 projects at national level**.

Ongoing international research grants are:
2019 European Project FET "cFLOW"
2018 European Project FET - Quantum Technologies "QOMBs"
2107 Singapore-NRF grant Germanium Based Materials for Silicon-compatible Light Sources

Ongoing national research grants are:
2014 ANR Projet "LIGNEDEMIR"
2014 ANR Projet "DOMANY"

Paris, 28/01/2019