Francesco Saverio Cataliotti

Born in Firenze in 1971 Nationality: Italian

Physics Education:

- Laurea in Physics from the University of Firenze: (110/110 cum Laude).
- Doctorate in Physics from the Italian Ministry of University: October 16th 1998

Academic Career:

- Associate Professor of Physics of Matter for the University of Catania from November 2002 to October 2007
- Associate Professor of Physics of Matter for the University of Firenze from November 2007 to June 2017
- Full Professor of Physics of Matter for the University of Firenze from October 2018
- Director of the National Institute of Optics of CNR from February 2021

Coordination Activity:

- Scientific Director of Quantum Information laboratory of the Scuola Superiore di Catania SSC (01/11/2002 - 31/10/2007).
- Member of the Directive Council of LENS (01/09/2004 - 01/09/2007).
- National Coordinator of Research and Training Network (RTN) "Atom Chips" (FP6 2004 - 2008).
- National coordinator of Project "SQUAT" of group V-INFN (2004 - 2005)
- National coordinator of Project "SQUAT-Super" of group V-INFN (2004 - 2005)
- Local Coordinator of PRIN "Cooperative phenomena in coherent systems of condensed matter and their realization in atomic chip devices". (COFIN2005).
- European Coordinator of Project "CHIMONO" (STREP) (FP7 2008 - 2011).
- Local Coordinator of FIRB "Futuro in Ricerca 2008" "Hybrid Quantum Technologies HYTEQ" (2010 - 2013)
- Local Coordinator of Erasmus Mundus Joint Doctorate "Europhotonics" since 2010
- European Coordinator of Project "MALICIA" (STREP) (FP7 2011 - 2014).
- Funder and Experimental Coordinator of the Joint Research Center for Quantum Science and Technology QSTAR (2012 -2016)
- Secretary of the European Group on Atomic Systems (EGAS) Board since 2014
- Local Coordinator of PRIN "Collective quantum phenomena: from strongly correlated systems to quantum simulators". (COFIN2010-11).
- CNR-Coordinator of Project “QuantERA” (ERANET Cofund H2020 2017-2022)
- National Expert for Quantum Technologies in the FET Flagship Board of Funders since 2016
- Italian representative in the European Quantum Communication Infrastructure (EuroQCI) Board since 2019

Research Activity:

My activity is mainly experimental and is centred on atomic physics and atom-laser interactions. It can be divided in lines that, starting form nonlinear atom-laser interaction, develop into the manipulation of the atomic momentum state, laser-cooling and the realisation of Bose-Einstein condensates. The optical manipulation of condensates has allowed to investigate problems concerning superfluidity and macroscopic quantum states. More recently I have been concerned with other coherent micromanipulation techniques with atoms, molecules and micromechanical systems with perspectives ranging from quantum computation to single molecule manipulation.

I am author of more than 80 scientific papers on international peer reviewed journals and numerous contributions to conferences and workshops. Overall, my works have received more than 3300 citations to date (32 citations per work) with an h-index of 26 (WoS data, researcherID K-4772-2015; orcid.org/0000-0003-4458-7977).