

Curriculum vitae et studiorum

Dr. Marco BARBIERI

Full Professor
Dipartimento di Scienze
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Awards

- 2019 **Outstanding Referee Award** of the American Physical Society.
- 2013 **Rita Levi-Montalcini Grant** awarded to Italian junior faculty members working abroad. The contract provided a three-year tenure-track position at the assistant professor level.
- 2009 **Marie Curie Intra-European Fellowship** within 7th Framework Program of the European Commission.
- 2007 **Marcofabio Righini Award** for the best Italian Ph.D. thesis in optics. The award is granted by the Istituto dei Sistemi Complessi and the Istituto della Struttura della Materia of CNR, the Italian National Research Council.

Research Activities

- 2019 - present **Full Professor**
Dipartimento di Scienze, Università degli Studi Roma Tre, Rome, Italy
- 2017 - present **Associate Researcher**
Istituto Nazionale di Ottica, Consiglio Nazionale delle Ricerche, Florence, Italy
- 2017 - 2019 **Associate Professor**
Dipartimento di Scienze, Università degli Studi Roma Tre, Rome, Italy
- 2014 – 2017 **Ricercatore a Tempo Determinato - Fixed-term Assistant Professor**
Dipartimento di Scienze, Università degli Studi Roma Tre, Rome, Italy
- 2013 – 2014 **Fixed-term departmental lecturer**
Department of Physics, University of Oxford, UK
- 2011 – 2013 **Post-doctoral fellow in “Coherent control for quantum photonics circuits”**
Ultrafast quantum optics and metrology group, University of Oxford, UK
Director: Prof. I. A. Walsmley
- 2008 – 2011 **Post-doctoral fellow in “Quantum state manipulation of light in the mesoscopic regime”**
Quantum optics group of the Laboratoire Charles Fabry de l’Institut d’Optique (LCF-IO), Palaiseau, France.
Directors: Prof. Ph. Grangier, Prof. R. Tualle-Brouri.
- 2006 – 2008 **Post-doctoral fellow in “Quantum computing by measurement-induced nonlinearities”**
Quantum Technology Lab of the University of Queensland, Brisbane, Australia.
Director: Prof. A. G. White.

Education

- 2003 – 2006 **Ph.D. in physics**, thesis on “*Hyperentangled two-photon states for quantum information and nonlocality tests*”
Quantum optics group of Sapienza Università di Roma, Rome, Italy.
Supervisors: Prof. F. De Martini and Prof. P. Mataloni
- 1998 – 2003 **Master’s degree in physics**
Università degli Studi di Bari, Italy, final mark 110/110 cum laude
Master’s thesis in the quantum optics group in Rome. Supervisors: Profs. V. Berardi (Università di Bari), F. De Martini and P. Mataloni.

Teaching

Courses

- 2022 — present Teacher of Mathematics - first year, Bachelor’s in Environmental Science and Bachelor’s in Optometry at Università Roma Tre.
- 2017 — present Teacher of Electromagnetism and Optics - second year, Bachelor’s in Optometry at Università Roma Tre.

Supervision of Ph.D. students

- 2023 – 2025 Supervisor of Gabriele Bizzarri, Università Roma Tre
2017 – 2020 Supervisor of the Ph.D. thesis of Valeria Cimini, Università Roma Tre
2016 – 2019 Supervisor of the Ph.D. theses of Luca Mancino, and Emanuele Roccia, Università Roma Tre
Secondary supervisor of the Ph.D. theses of Iryna Miatka and Camillo Tassi, Università Roma Tre

Supervision of Master's and Bachelor's students

Laurea in Ottica e Optometria, Università Roma Tre: Aurora Bruno, Chiara Casucci, Miriana Colasanti, Michela Spinelli (2023); Angelica Dilernia, Eleonora Piacentini (2022); Vittorio Cinque, Adele Erculei, Rousalia I. Toreva (2021); Denise Cossu (2020); Diego Acciaccarelli, Giorgia Grossi, Susanna La Porta (2018); Simona De Paulis (2017).

Laurea in Fisica, Università Roma Tre: Giorgia Grossi (2022), Vincenzo Citro (2021).

Laurea Magistrale in Fisica, Università Roma Tre: Walter Zedda (2021), Matteo Altorio (2016); Sapienza Università di Roma: Michele M. Feyles (2018), Federico Centrone (2017), Luca Mancino (2016).

Laurea in Ingegneria Informatica, Università Roma Tre: Lorenzo Giusti (2018).

Other duties

- 2016 Teacher of the “Quantum optics and quantum information” module of the on-line modern physics course, organised by the Ministry of Education, University, and Research (MIUR) for high-school teachers.
2015 – 2020 Member of the Teaching Board of the Doctoral School in Materials Science, Nanotechnologies and Complex Systems at Università Roma Tre.

Community service

Service roles in the department

- 2023-2026 Coordinator of the Teaching Panel of the Doctoral School in Condensed Matter and Nanotechnologies
2018-2025 Coordinator of the Teaching Panel of the degree in Optics and Optometry
2016-2018 Member and, since 2017, Coordinator of the Departmental Commission for Educational Orientation

Editorial duties

Referee for peer-reviewed journals: AAAS (*Science, Science Advances*), APS (*Physical Review A, Physical Review Letters, Physical Review X*), IOP (*New Journal of Physics, Quantum Science and Technology*), NPG (*Nature, Nature Communications, Nature Photonics, Scientific Reports*), OSA (*Optica, Optics Express, Optics Letters*).

Publications

Summary

99 articles published in peer-reviewed journals, including:

1 Science, 1 Nature Photonics, 1 Nature Physics, 1 Nature Chemistry, 1 Proceedings of the National Academy of Science, 3 Nature Communications, 1 Science Advances, 3 Nature Partner Journal Quantum Information, 2 Optica, 22 Physical Review Letters, 1 PRX Quantum