Lara Benfatto - Copia del Curriculum Vitae ai fini della pubblicazione

Academic Degrees

1998-2001: PhD in Physics at the University of Rome "La Sapienza". Thesis on "Spectral properties, quasiparticles and collective modes in High- T_c superconductors", supervisor Prof. C. Castellani.

30/10/1998: Degree in Physics with full marks and honor (110/110 cum laude) at University of Rome "La Sapienza". Thesis "Effetto delle fluttuazioni superconductive sulla suscettibilità di carica e di spin" (Effect of superconducting fluctuations on the spin and charge susceptibility), supervisor Prof. C. Castellani.

1993-1998: Undergraduate studies in Physics at the University of Rome "La Sapienza".

Scientific career

2019-present Associate Professor in Theoretical Physics of Condensed Matter (02/B2) at the Physics Department, Sapienza University of Rome, Italy

2009-2109 Researcher (staff) at the CNR-ISC, Rome, Italy.

2006-2009 Young Researcher Grant of the "Enrico Fermi" Center of Rome, Rome, Italy.

2004-2006 Research fellowship (assegno di ricerca) of the CNR-INFM Center for Statistical Mechanics and Complexity in Rome.

2003-2004 Post-doc position of the Swiss National Foundation (under the MANEP program) for an inter-university project involving the University of Fribourg, University of Neuchâtel, and University of Geneva.

 $\mathbf{2001}\text{-}\mathbf{2003}$ Post-doc position at the Physics Department of the University of Fribourg, Switzerland.

Conferences organization

2021 Co-chair of the international workshop Faraday discussion on "Optical to THz Control of Materials", London, UK, May 23-25 2022.

2021 Member of the Advisory Committee for the Conference M2S, July 2022

2019 Chair of the Workshop "SuperTop2019: Emergent phenomena at low dimensions", Sapienza University of Rome, 4-6 September 2019.

2019Chair of the Workshop "Light and Technology: the frontier of emergent systems", Sapienza University of Rome, March 18 2019.

2018 Co-chair of the International Conference "Low energy electrodynamics in solids" LEES 2018, Portonovo (AN), Italy, 24-29 June 2018.

2018 Chair of the "International Workshop on 2D Superconductivity", Sapienza University, Rome, 22 June 2018.

 $\mathbf{2017}$ Member of the Advisory Committee for the LT-28 conference, Gothenburg, Sweden, August 9-16, 2017

2016 Member of the Program Scientific Committee of the LEES 2016 conference, Shiga, Japan, 29 May- 3 June, 2016

2015 Chair of the Workshop: "Superconductivity on the verge: nanostructures and inhomogeneity", Lorentz Center, Leiden, 27-31 July 2015

 ${\bf 2014}$ Organizer of the Workshop: "New frontiers for Majorana fermions from condensed to dark matter", LNF Frascati, 5-6 Maggio 2014

2014 Member of the Program Scientific Committee of the LEES 2014 conference, Amboise, France, 29June-4 July 2014

Funding(as PI)

2017-2019 Maeci- SuperTop "Topological Phases of Matter in 2D Superconducting materials". Significant Research project within the frame of the Executive Programme of Scientific and Technological Cooperation between Italy and India. Role: Principal Investigator

2014-2017 Prin-Miur 2012: Rideiron "Using controlled disorder to investigate the mechanism of iron-based superconductors". Role: Coordinator of the CNR Unit.

Students and postdocs supervising

2012-2021 Master students: Marco Marciani, Marco Santagata, Manuel Offidani, Raffaele Battilomo, Giulia Venditti, Mattia Udina, Francesco Gabriele, Giovanni Caldarelli, Jacopo Fiore, Riccardo Senese.

2012-2021 PhD students: Laura Fanfarillo, Tommaso Cea, Ilaria Maccari, Mattia Udina, Francesco Gabriele, Giovanni Caldarelli, Jacopo Fiore

2014-2021 Post-docs: Valentina Brosco (2014-2016), Marco Marciani (2020-2022).

Scientific service

2012-present Peer reviewer for the US National Science Fundation, the Israel Science Fundation and the Deutsche Forschungsgemeinschaft

2001-present Referee for Physical Review B, Physical Review Letter, Review of Modern Physics, European Physics Journal B, Europhysics Letters, Science, Nature Physics, Nature Communications and Nature Photonics.

2017-present Member of the Editorial Board of the Physical Review B

Prizes and Recognitions

2018 Winner of the Ludwig-Genzel-Prize 2018 "for advancing the theoretical understanding of the dynamical response of interacting electronic systems, in particular superconductors", see the prize webpage.

2016 Named Outstanding Referee or the American Physical Society

2001Winner of the Prize Premio per giovani autori scientifici (Joung Researcher Prize) for the innovative contents of the poster: "Collective mode contribution to the superfluid density depletion in high- T_c superconductors", INFMeeting, Roma, June 18-22 2001

Publications and presentations

69 talks at conferences and schools, among them 49 invited. 33 invited seminars and colloquia at research institutions. The complete list of them can be found at the candidate's webpage.

107 Publications, 2618 citations and h-index 30 from WoS, 3680 citations and h-index 37 from Google Scholar (as of 28 December 2021). Among them 1 Nature Material, 1 Nature Physics, 3 Nature Communications, 17 Physical Review Letter, 54 Physical. Review B. The complete list of them can be found at the candidate's webpage.

Rome, December 28, 2021

(Lara Benfatto)

Lore Benfatto