

Curriculum vitae et studiorum of Jacopo Fiore.

Official education:

- November 2021/Present: Ph.D. student at Sapienza University of Rome, Physics Department, thesis advisor Prof. Lara Benfatto, thesis topic “Non-linear optical response in unconventional superconductors”;
- November 2019/Present: student at Sapienza School for Advanced Studies (SSAS), academic class of Science and Technology;
- September 2019 – July 2022: student at Sapienza University of Rome, master’s degree in Physics, curriculum “Condensed Matter Physics: Theory and Experiment”, with final grade 110/110 cum laude, thesis title “Study of non-linear THz response in multiband superconductors”, supervisor Prof. Lara Benfatto, average weight of the exam grades 29.84/30, number of laudes 4;
- September 2016 – July 2019: student at University of Trieste, bachelor’s degree in Physics, with final grade 110/110 cum laude, thesis title “Study of linear response functions in metals through the Gutzwiller variational approach”, supervisors Profs. Michele Fabrizio (SISSA – Trieste) and Fulvio Parmigiani (University of Trieste – University of Cologne), average weight of the exam grades 28.64/30, number of laudes 4;
- September 2016 – July 2019: student at Collegio Universitario “L. Fonda” of Trieste;
- June 2016: Diploma Esame di Stato at Liceo Scientifico “F. Masci” of Chieti, with final grade 100/100 cum laude.

Other relevant experiences:

- June 2022: summer school “Exosup2022: School on Exotic Superconductivity”, chosen to give a students’ talk about my poster “Contribution of Collective Excitations to Third Harmonic Generation in Superconducting MgB_2 ”;
- May 2022: poster presentation in conference “From optical to THz control of materials Faraday Discussions” (online), poster title “Contribution of Collective Excitations to Third Harmonic Generation in Superconducting MgB_2 ”;
- August 2020 – October 2020: annual SSAS research project on “Role of electron-phonon interaction in graphene photoemission spectra: a many-body approach”, supervisor Prof. Lara Benfatto (Sapienza University of Rome);
- September 2018 – November 2018: curricular stage at Elettra Sincrotrone Trieste in the T-ReX (Time Resolved X-ray spectroscopy) Laboratory Group, supervisors Prof. Fulvio Parmigiani and Dr. Federico Cilento;
- September 2016: summer school in physics at University of Trieste;
- July 2016: summer school in modern physics at University of Udine;
- June 2015: summer school in classical physics at the Gran Sasso National Laboratory.

Publications:

- Jacopo Fiore, Mattia Udina, Marco Marciani, Goetz Seibold, Lara Benfatto, Contribution of collective excitations to third harmonic generation in multiband superconductors: the case of MgB_2 , arXiv:2207.00483;
- Mattia Udina, Jacopo Fiore, Tommaso Cea, Claudio Castellani, Goetz Seibold, Lara Benfatto, THz non-linear optical response in cuprates: predominance of the BCS response over the Higgs mode, *Faraday Discussions*, 2022.

Language skills:

- Italian: mother tongue;
- English: CEFR level C1, achieved in July 2015 (IELTS certificate).

12/07/2022

F.to Jacopo Fiore