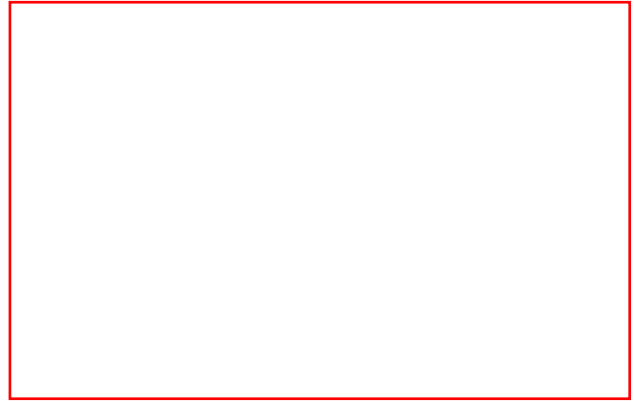


Andrea Ghira

Résumé



Education and Training

- 2021–Present **Phd student in theoretical Physics**, Università degli Studi di Genova Dipartimento di Fisica, Genoa, Italy
- 2021–Present **INFN associated, SPIF project**, Università degli Studi di Genova Dipartimento di Fisica, Genoa, Italy
- 2019– 2021 **Master's Degree in Physics**, Università degli Studi di Genova Dipartimento di Fisica, Genoa, Italy
 - Master's Thesis: "*Infrared Divergences in Gauge Theories*" under supervision of Prof. S. Marzani and Prof. G.Ridolfi.
 - Final Mark: *110/110* cum laude (full marks with honors)
- 2016– 2019 **Bachelor's Degree in Physics**, Università degli Studi di Genova Dipartimento di Fisica, Genoa, Italy
 - Bachelor's Thesis: "*Adiabatic Theorem and Berry's Phase*" under supervision of Prof. L.Mattera
 - Final Mark: *110/110* (full marks)
- 2011– 2016 **Classic High School Diploma**, Liceo Classico Giuseppe Mazzini, Genoa, Italy

Languages

- Italian: Native
- English: Advanced (IELTS certificate obtained on 18/11/2023)
- French: Basic

List of Publications

- *Heavy-flavour Jet substructure*; P. Dhani, O. Fedkevych, A. Ghira, S. Marzani, G. Soyez, soon to appear.
- *An improved description of charm fragmentation data*; M. Cacciari, A. Ghira, S. Marzani, G. Ridolfi, e:Print 2406.04173
- *Les Houches 2023: Physics at TeV Colliders: Standard Model Working Group Report*, contribution to PhysTeV 2023, e:Print 2406.00708
- *On heavy-flavour jets with Soft Drop*; S. Caletti, A. Ghira, S. Marzani, The European Physical Journal C, DOI: 10.1140/epjc/s10052-024-12562-7.
- *A consistent resummation of mass and soft logarithms in processes with heavy flavours*; A. Ghira, S. Marzani, G. Ridolfi, Journal of High Energy Physics, DOI: 10.1007/JHEP11(2023)120.
- *Soft resummation in processes with heavy quark: bridging the gap from 4-flavor to 5-flavor scheme*; A. Ghira, conference proceeding for DIS 2023.
- *Non commutativity between massless and threshold limit in processes with heavy quarks*; A. Ghira, conference proceeding for LFC 2022.
- *Soft logarithms in processes with heavy quarks*, D. Gaggero, A. Ghira, S. Marzani, G. Ridolfi, Journal of High Energy Physics, DOI: 10.1007/JHEP09(2022)058.

Conferences and Seminars

2024

- Speaker at *Parton shower and resummation 2024*, “Heavy flavour jet substructure”, Graz, Austria
- Speaker at *Flavoured jets at the LHC*, “Heavy flavour jet substructure”, IPPP, Durham, UK
- Seminar at LPTHE, “A systematic approach to resummation with heavy flavours”, Paris, France
- Seminar at IPHT Saclay, “A systematic approach to resummation with heavy flavours”, Paris, France

2023

- Speaker at *Milan Christmas Meeting 2023*, “A consistent resummation of mass and soft logarithms in processes with heavy quarks”, Università Milano Statale, Milan, Italy
- Speaker at *Heavy flavours at high pt*, “On heavy-flavour jets with Soft Drop”, Higgs Centre, Edinburgh, UK.
- Invited speaker at DIS 2023, Michigan State University, “Soft logarithms in processes with heavy quarks”, East Lansing, USA.
- Seminar at Fermilab, “A consistent resummation of mass and soft logarithms in processes with heavy quarks”, Chicago, USA
- Seminar at Oxford Physics Department, “A consistent resummation of mass and soft logarithms in processes with heavy quarks”, Oxford, UK.

2022

- Speaker at *Milan Christmas Meeting 2022*, “Soft logarithms in processes with heavy quarks”, Università Milano Statale, Milan, Italy.

- Invited speaker at QCD@LHC 2022, IJC Lab, “Soft logarithms in processes with heavy quarks”, Orsay, France.
- Invited speaker at LFC 2022, “Soft logarithms in processes with heavy quarks”, Trento, Italy.

Research Stays

2023

- ESI program on *Quantum Field Theory at the frontiers of the strong interaction* (1 week), Vienna, Austria
- Visitor at DAMPT (1 week), Cambridge, UK
- Visitor at Oxford Physics Department (1 week), Oxford, UK

2022

- Visitor at Oxford Physics Department (1 week), Oxford, UK

Workshops and Phd schools

2023

- *Theory challenges in the precision era of LHC 2023* (3 weeks), GGI, Florence, Italy.
- *PhysTeV 2023* (2 weeks), Les Houches, France.

2022

- *CTEQ 2022* (2 weeks), University of Pittsburgh, Pittsburgh, USA.
- *GGI Lectures on the Theory of Fundamental Interactions 2022* (3 weeks), GGI, Florence, Italy.

Grants

2024 **Dissemination Conference Grant**, supported by COMETA (CA22130) Cost Action

Teaching Experience

2023–Present **Orientation Tutor for high school students**, Università degli Studi di Genova, Genoa, Italy

2020–Present **Teaching Assistant activity**, Università degli Studi di Genova, Genoa, Italy

- 2023–2024, Lectures of Quantum Mechanics for the course of Physics.
- 2022–2024, Lectures of General Physics for the course of Science of Materials.
- 2021–2022, Lectures of General Physics, Geometry and Mathematics for the course of Biomedical Engineering
- 2020–2021, Lectures of General Physics for the course of Civil Engineering