

Riccardo Buscicchio | Curriculum Vitæ

riccardo.buscicchio@unimib.it • www.riccardobuscicchio.com • July 16, 2024

Email: riccardo.buscicchio@unimib.it

Academic positions

Università degli Studi di Milano-Bicocca **Milan, Italy**
Postdoctoral scholar (Assegnista di ricerca), Department of Physics "G.Occhialini" **2021 - current**

- Main activity: development of LISA data analysis ground-segment for the Italian Space Agency.

Education

University of Birmingham **Birmingham, UK**
Ph.D., School of Physics & Astronomy **2017-2021**

- Supervisor: A. Vecchio. Thesis resulted in 6 short-author publications.
- Thesis Title: Topics in Bayesian population inference for Gravitational Wave Astronomy

Università degli Studi di Pisa **Pisa, Italy**
Master's degree in Theoretical physics **2013-2016**

- Supervisor: G. Cella. Thesis resulted in one short-author publications.
- Thesis title: An improved detector for non-gaussian stochastic background of gravitational waves.

Columbia University **New York NY, USA**
INFN-NSF Summer Internship **Jun-Sept 2013**

- Supervisor: S. Marka, I. Bartos.

Metrics

Publications:

- 20 short-author papers published in major peer-reviewed journals (out of which 5 first-authored papers).
- 12 collaboration papers, with substantial contribution, published in major peer-reviewed journals
- 5 papers in submission stage,
- 2 other publications (thesis, white papers, long-authorlist reviews)

Total number of citations: >11100. **h-index:** 22 (using ADS and INSPIRE).

Web links to list services: [ADS](https://arxiv.org/); [INSPIRE](https://inspirehep.net/); [arXiv](https://arxiv.org/); [orcid](https://orcid.org/).

Full list of publications available at www.riccardobuscicchio.com/publications.

Full list of presentations available at www.riccardobuscicchio.com/talks.

Grants, Prizes, & Awards

Career prizes:

- Braccini PhD Thesis Prize, Gravitational Wave International Committee honorable mention. **2021**
- Michael Penston PhD Thesis Prize, Royal Astronomical Society runner-up prize. **2021**

Other funding:

- EuroHPC PRACE "LISAS-FIT" proposal, 100k CPUh on Leonardo BOOSTER **2023**
- Google Cloud for Researchers, 4kEUR Google Cloud Research Credits **2023**
- CINECA ISCRA Type-C project "LISA-MW" proposal, 10k CPUh at the Italian National HPC center. **2022**
- Travel Grant, Horizon 2020 AHEAD 2020 (High Energy Astrophysics) **2021**
- Travel Grant, American Physical Society, DGRAV Student Travel Grant **2020**
- Travel Grant, Institute of Physics Student Travel fund **2019**

Supervision, Mentoring, Teaching

Ph.D. student co-supervisor:

- A. Spadaro, University of Milano-Bicocca. 2022-2025
- F. Pozzoli, University of Insubria. 2022-2025

MSc student mentoring:

- D. Chirico, University of Milano-Bicocca, Master's thesis. 2023-2024
- S. Corbo, Politecnico di Milano, Master's thesis. 2023-2024
- R. Rosso, University of Pisa, Master's thesis (co-mentor). 2023-2024
- G. Astorino, University of Pisa, Master's thesis (co-mentor). 2023-2024
- M. Piarulli, University of Milano-Bicocca, Master's thesis. 2022-2023
(now PhD student at Univ. of Toulouse)
- A. Spadaro, University of Milano-Bicocca, Master's thesis. 2021-2022
(now PhD student at Univ. of Milano-Bicocca)
- A. Carzaniga, University of Milano-Bicocca, Master's thesis. 2021-2022
- A. Geminardi, University of Milano-Bicocca, Master's thesis. 2021-2022
(now PhD student at Univ. of Pavia)
- E. Finch, University of Birmingham, Year 4 project. 2018
- V. Spasova, University of Birmingham, Year 4 project. 2018

BSc student mentoring:

- H. P. G. Carabajo, University of Milano-Bicocca, Bachelor's thesis. 2023-2024

Taught classes:

- Current and future challenges in GW astronomy, PhD course, Milano-Bicocca (IT). 2023
- Mathematical physics and gravity (MAF900), Module 3, PhD course, Univ. of Stavanger (NO). 2023
- Contributed lecture to Astrostatistics (F5802Q014/20), Astrophysics MSc, Milano-Bicocca. 2022

Tutoring:

- Year 2 Python Computing Lab, Physics BSc, Birmingham. 2017-2021
- Year 2 Maths for physicists, Physics BSc, Birmingham. 2017-2019
- Year 4 Physics and communication skills, Physics BSc, Birmingham. 2019

Academic service, editorial and research responsibilities

International collaboration responsibilities

- PA&QA lead of the Coordination Unit L2D (ESA LISA Project Office) 2024-current

Journal referee

- Physical Review Letters
- The Astrophysical Journal Letters
- Journal of Cosmology and Astroparticle Physics
- Monthly Notices of the Royal Astronomical Society
- Physics Letters D
- The Open Journal of Astrophysics
- NASA Technology Transfer Program

Editorial responsibilities

- MDPI Universe 2024
Special Issue "*Challenges and Synergies with Future Gravitational Wave Observatories*".
- Editorial board Lensing subgroup in the LIGO, Virgo, KAGRA collaboration 2023
- Co-editor of a Living Review in relativity issue on "LISA data analysis" 2022-2023

Conference organizer (or committee member)

- IFPU focus week on "*Emerging methods in GW population inference*", Trieste, IT. 2024
- LISA Astrophysics Working Group Conference, Birmingham, UK. 2022

- *Gravitational-wave populations: what's next?*, Milan, Italy. 2023
- *Gravitational-wave Excellence Alliance Training (GrEAT) PhD school*, Birmingham, UK. 2019
- *Gravitational-wave Open Science Center First Open Data Workshop*, Remote 2019

Memberships

- Italian Center for Supercomputing (ICSC). since 2021
- TEONGRAV National Initiative (Gravity Theory) since 2021
Italian National Institute for Nuclear Physics (INFN).
- LIGO, Virgo, Kagra Collaboration, full member. since 2017
- LISA Consortium, full member. since 2018
- Italian Society of General Relativity and Gravitational Physics (SIGRAV) since 2021
- Istituto Nazionale di Astrofisica (INAF) since 2021
- American Physical Society (APS), member.
- Italian Physical Society (SIF), member 2021
- Royal Astronomical Society (RAS), fellow. 2018-2021