## Riccardo Buscicchio | Presentations

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**Presentations:** 29 talks at conferences, 10 talks at department seminars,

Invited talks marked with \*.

## Talks at conferences:

- **29.**\* Emergence of Milky Way structure in the first year of LISA data. CERN UniGe Gravitational Wave meeting, Geneva, Switzerland, 2025/05/23.
- **28.** LISA stellar-mass black holes informed by the GWTC-3 population: event rates and parameters reconstruction. LISA Astrophysics Working Group Meeting 2024, Garching, Germany, 2024/11/05.
- **27.**\* Astrophysics panel session.
  GRASP: Gravity Shape Pisa 2024, Pisa, Italy, 2024/10/24.
- **26.**\* Beyond Gauss? A more accurate model for LISA astrophysical noise sources. Kavli Institute for Cosmology Seminars, Cambridge, United Kingdom, 2024/10/14.
- **25.**\* Beyond Gauss? A more accurate model for LISA astrophysical noise sources. Heterogeneous Data and Large Representation Models in Science, Toulouse, France, 2024/10/01.
- **24.** LISA stellar-mass black holes informed by the GWTC-3 population: event rates and parameters reconstruction. 15th International LISA Symposium, Dublin, Ireland, 2024/07/08.
- 23.\* LISA data analysis: from the stochastic background to the Milky Way. 11th LISA Cosmology Working Group Workshop, Porto, Portugal, 2024/06/19.
- 22.\* An introduction to Bayesian Inference.
  International Pulsar Timing Array Student Week, Milan, Italy, 2024/06/17.
- **21.**\* Statistical challenges in LISA data analysis.

  LAUTARO joint meeting, GSSI-University of Milano-Bicocca, Milano, Italy, 2024/04/17.
- **20.** From mHz to kHz: stochastic background implications on astrophysical sources and population reconstruction. LISA Astrophysics working group workshop, University of Milano-Bicocca, Milano, Italy, 2023/09/13.
- **19.** Non-gaussian gravitational wave backgrounds across the GW spectrum. XXV Sigrav conference on general relativity and gravitation, SISSA, Trieste, Italy, 2023/09/04.
- **18.**\* LISA SGWB data analysis (session chair).

  Data Analysis Challenges for SGWB Workshop, CERN, Geneva, Switzerland, 2023/07/19.
- 17.\* Global Fit and foregrounds. LISA SGWB detection brainstorming, Univ. of Geneva, Geneva, Switzerland, 2023/07/17.
- **16.**\* Beyond functional forms: non-parametric methods. (panelist talk). Gravitational-wave populations: What's next?, University of Milano-Bicocca, Milan, Italy, 2023/07/01.
- **15.** The last three years: multiband gravitational-wave observations of stellar-mass binary black holes. LISA Astrophysics working group workshop, University of Birmingham, Birmingham, UK, 2022/06/23.
- **14.** The last three years : multiband gravitational-wave observations of stellar-mass binary black holes. American Physical Society (APS) April meeting, New York (NY), USA, 2022/04/12.
- **13.** Bayesian parameter estimation of stellar-mass black-hole binaries with LISA. XXIV Sigrav conference on general relativity and gravitation, Urbino, Italy, 2021/09/08.
- **12.** Chirp: a web and smartphone application for visualization of gravitational-wave alerts. 14th Amaldi Conference on Gravitational Waves, (online), 2021/07/21.
- **11.**\* Search for lensing signatures in the gravitational-wave observations from the first half of LIGO-Virgo's third observing run.
  - 2nd EPS conference on gravitation, (online, on behalf of LVK), 2021/05/27.
- **10.**\* Bayesian parameter estimation of stellar-mass black-hole binaries with LISA. LISA Data Challenge meeting, (online), 2021/06/17.
- **9.**\* Search for lensing signatures in the gravitational-wave observations from the first half of LIGO-Virgo's third observing run.
  - Webinar on behalf of the LVK collaboration, (online), 2021/05/27.
- **8.** Milky Way Satellites Shining Bright in Gravitational Waves. 13th LISA Symposium, (online), 2020/09/13.

- 7. Constraining the Lensing of Binary Black Holes from Their Stochastic Background. LISA Sprint workshop, CCA, Flatiron Institute, New York (NY), USA, 2020/03/04.
- **6.** Multiple source detection in GW astronomy: the label switching problem. 30th Texas Symposium, University of Portsmouth, Portsmouth, UK, 2019/12/12.
- **5.** Non-gaussian Stochastic background search with importance sampling. LIGO, Virgo, KAGRA September meeting, Warsaw, Poland, 2019/09/01.
- **4.** An improved detector for non-Gaussian stochastic background. Stochastic Background Data Analysis for LISA meeting, Instituto de Fisica Teorica, Madrid, Spain, 2019/06/01.
- **3.** Hierarchical nonparametric density estimation for population inference. LIGO, Virgo, KAGRA March meeting, Winsconsin, USA, 2019/03/18.
- 2. Fast Evaluation of Campbell processes N-point correlation functions.

  Astro Hack Week: Data Science for Next-Generation Astronomy, Lorentz Center, Leiden, The Netherlands, 2018/08/01.
- Stochastic Gravitational Wave Background Data Analysis for Radler.
   5th LISA Cosmology Working Group workshop, Physicum, University of Helsinki, Helsinki, Finland, 2018/06/01.

## Talks at department seminars:

- **10.**\* Fast LISA inference using Gaussian processes. University of Geneva, Geneva, Switzerland, 2025/05/21.
- **9.**\* Emergence of Milky Way structure in the first year of LISA data. Department of Physics, University of Pisa, Pisa, Italy, 2025/05/16.
- **8.**\* Statistical challenges in GW inference: an application of field theory to direct population reconstruction in LISA. APP seminar, SISSA, Trieste, Italy, 2024/05/06.
- **7.\*** GRAF: Gravitational waves data and global fit.

  Department of Physics, University of Milano-Bicocca, Milan, Italy, 2023/12/14.
- **6.**\* LISA global inference: statistical and modelling challenges for the Milky Way. Max Planck Institute for Astrophysics, Garching, Germany, 2023/11/29.
- **5.\*** LISA Global inference: modelling, statistical, and computational challenges. Department of Physics, University of Pisa, Pisa, Italy, 2023/10/04.
- **4.\*** Gravitational waves in the many sources, many detectors era. Institute for Mathematics and Physics, University of Stavanger, Stavanger, Norway, 2022/09/29.
- **3.**\* Stellar mass binary black holes: what, when, and where. Astroparticule et cosmologie, Universitè Paris Citè, Paris, France, 2022/06/12, (online).
- 2.\* The last three years: multiband gravitational-wave observations of stellar-mass binary black holes. Physics Department, Columbia University, New York (NY), USA, 2022/04/07.
- **1.\*** Set the alarm: Bayesian parameter estimation of stellar-mass black-hole binaries with LISA. Sun Yat-sen University, Zhuhai, China, 2021/07/30, (online).

## Outreach & public engagement talks:

- **5.** Onde gravitazionali: ascoltare l'Universo anzich'e solo guardarlo. University of Milano-Bicocca, Milan, Italy, 2024.
- **4.** An orchestra of lasers and gravitational waves. Pint of Science 2024, Milan, Italy, 2024.
- **3.** Gravitational-waves in space and on Earth.

  Manchester Museum of Science and Industry, Manchester, UK, 2018.
- An orchestra of lasers and gravitational waves.
   Manchester Museum of Science and Industry, Manchester, UK, 2018.
- **1.** A Universe of waves. Science Caf'e, Italy, 2018.