

# Simone Mastrogiovanni

**Email:** mastrosi@apc.in2p3.fr

**Date of birth:** 23/06/1991

**Address:** Astroparticule et Cosmologie Laboratoire  
10 Rue Alice Domon et Léonie Duquet  
Paris, France

**Summary of the CV:** I am a postdoctoral researcher working on gravitational waves astrophysics and data analysis and I am member of the LIGO and Virgo collaboration. My research experience relates to data analysis and inference for gravitational waves. My research interests mostly concerns astrophysical and cosmological implications from populations of gravitational-waves sources.

## Positions

Nov. 2021 -	Postdoctoral fellowship at Nice Observatory, Nice, France.
Jan. 2019 - Oct 2021	Postdoctoral fellowship at University Paris-Diderot Astroparticule et Cosmologie Laboratoire, Paris, France.

## Education

11/2015-12/2018	Ph.D. Astronomy, Astrophysics and Space Science, University of Rome Sapienza.
10/2013-10/2015	Master of Science in Astronomy and Astrophysics, University of Rome Sapienza.
10/2010-09/2013	Bachelor of Science in Physics, University of Rome Sapienza.

## Grants and funds

2018	Grant (2.5k€) European COST Action-CA16104 .
2017	Grant (1.0k€) “Avvio alla ricerca” from Sapienza University of Rome.
2017	Grant (13k\$) “LIGO visitor program”: Visiting research period.
2016	Grant (1.5k€) “Avvio alla ricerca” from Sapienza University of Rome.
2016	Grant from the French embassy in Italy (1.0k€).

## Supervising and Teaching

2021	Teacher at ISAPP Summer school on Gravitational Waves, Remote school.
2020–2021	I supervised 3 students for the Master of Science studies. Two students from the Astroparticule et Cosmologie Laboratoire and one student from University of Rome Sapienza.
2021	French national qualification for teaching Astronomy, Astrophysics and Fundamental physics (“Maître de conférence”).
2020	Teacher for the International School in Astroparticle Physics on gravitational waves.
2020	10 hours seminar for PhD students of the French national “STEP’UP” doctoral school.
2014–2018	Almost 300 hours of tutoring activity for Physics laboratory courses, University of Rome Sapienza.

## Peer review activity

For the complete number of reviews that I have performed, check my [Publons account](#).

- 2021 American Physical Society: Physical Review D (PRD).
- 2021 Monthly Notices of the Royal Astronomical Society (MNRAS).
- 2020 IOP Publishing journal Machine Learning: Science and Technology (MLST).
- 2020 Nature Astronomy peer reviewer.
- 2019 IOP Trusted reviewer for Classical Quantum Gravity.

## Publications (last 10)

For a complete list of my publications, including LIGO and Virgo collaboration publications: query on [NASA/ADS](#).

- 2021 Mastrogiovanni, S., et al., “*The potential role of binary neutron star merger afterglows in multimessenger cosmology*”, Astronomy & Astrophysics, Volume 652, id.A1, 13 pp.
- 2021 Mastrogiovanni, S., et al., “*Cosmology in the dark: On the importance of source population models for gravitational-wave cosmology*”, eprint arXiv:2103.14663
- 2021 D’Antonio, S., et al., “*Sidereal filtering: A novel robust method to search for continuous gravitational waves*”, Physical Review D, Volume 103, Issue 6, article id.063030
- 2021 Mastrogiovanni, S., et al., “*Gravitational wave friction in light of GW170817 and GW190521*”, Journal of Cosmology and Astroparticle Physics, Issue 02, article id. 043 (2021).
- 2020 Isi, M., et al., “*Establishing the significance of continuous gravitational-wave detections from known pulsars*”, Physical Review D, Volume 102, Issue 12, article id.123027
- 2020 Mastrogiovanni, S., et al., “*Probing modified gravity theories and cosmology using gravitational-waves and associated electromagnetic counterparts*”, Physical Review D, Volume 102, Issue 4, article id.044009
- 2020 Barausse, E., et al., “*Prospects for fundamental physics with LISA*”, General Relativity and Gravitation, Volume 52, Issue 8, article id.81
- 2020 Gray, R., et al., “*Cosmological inference using gravitational wave standard sirens: A mock data analysis*”, Physical Review D, Volume 101, Issue 12, article id.122001
- 2020 Piccinni, O. J., et al., “*Directed search for continuous gravitational-wave signals from the Galactic Center in the Advanced LIGO second observing run*”, Physical Review D, Volume 101, Issue 8, article id.082004
- 2020 Tsang, K. W., et al., “*A morphology-independent search for gravitational wave echoes in data from the first and second observing runs of Advanced LIGO and Advanced Virgo*”, Physical Review D, Volume 101, Issue 6, article id.064012

## Awards

- 2021 Amaldi Research Center award for the two best PhD theses
- 2019 Honorable mention Braccini Thesis prize
- 2018 Award best poster presentation - GEMMA workshop
- 2016 Award “Tito Maiani” 2016 for Master thesis in physics - Accademia dei Lincei

## Contributive and Invited talks

I gave more than 30 talks at international conferences and workshops 5 of which as invited speaker.