

Michela Mapelli, Curriculum Vitae

Albert Ueberle Str. 2, 69120 Heidelberg, Germany

✉ mapelli@uni-heidelberg.de

☎ +496221546710

🌐 <https://demoblack.com>

🌐 <https://web.oapd.inaf.it/mapelli/>

SHORT OVERVIEW

I am a computational astrophysicist, working in the field of compact objects, massive binary star evolution, star cluster dynamics, and gravitational-wave astrophysics. I obtained my PhD in 2006 from SISSA. I was a postdoc (Forschungskredit fellow) at the University of Zurich and then a senior postdoctoral fellow in Milan. In 2011, I moved to a permanent position at the Italian Institute for Astrophysics (INAF). I have been a fixed-term full professor at the University of Innsbruck (2017–2018) and a tenured associate professor at the University of Padova (2018–2023). Since 2023, I am a tenured full professor at Heidelberg University.

The European Astronomical Society awarded me the MERAC PRIZE (2015) for the Best Early Career Researcher in Theoretical Astrophysics in recognition of my "theoretical and computational contributions to the dynamics of star clusters and galaxies, the reionization epoch, the Galactic centre, and the formation of massive stellar black holes".

I am the PI of an ERC consolidator grant (DEMOBLACK, "The demography of black hole binaries in the era of gravitational wave astronomy"). The DEMOBLACK project focuses on the formation channels of binary compact objects, to understand their contribution to gravitational wave emission. This combines expertise in stellar and compact object astrophysics, dynamics of star clusters, and gravitational wave astrophysics, with an interdisciplinary approach.

EDUCATION

SISSA (International School for Advanced Studies)

Trieste, Italy

Ph.D. student

2003–2006

- Ph.D. in Astrophysics obtained on October 19th 2006. Thesis on "Relic signatures of reionization sources", supervisor: prof. Andrea Ferrara.

University of Milano Bicocca

Milano, Italy

Master student

1998–2003

- Master in Physics (Italian university degree) obtained on February 25th 2003, grade: 110/110 cum laude. Thesis on "Four-body interactions in globular clusters: the case of the millisecond pulsar PSR J1911-5958A", supervisor: prof. Monica Colpi.

ACADEMIC POSITIONS

Zentrum für Astronomie (ZAH), Universität Heidelberg

Heidelberg, Germany

Full professor

2023 - now

- Position sponsored by the Cluster of Excellence STRUCTURES, appointment at the Institut für Theoretische Astrophysik (ITA).

Department of Physics and Astronomy, University of Padua

Padua, Italy

Associate professor

2018 - 2023

- Position obtained through the "direct call" procedure issued by the Italian Ministry of the University, following the award of a major grant (ERC Consolidator Grant 2017).

- Gran Sasso Science Institute (GSSI)** **L'Aquila, Italy**
Visiting professor *2020 – now*
 ○ At GSSI, I teach the invited course "Formation of compact objects".
- University of Innsbruck** **Innsbruck, Austria**
Fixed-term full professor *2017 – 2018*
 ○ I served as chair of the Extra-galactic Astrophysics Group at the Institut für Astro- und Teilchenphysik of the University of Innsbruck.
- INAF (Italian National Institute for Astrophysics)** **Padua, Italy**
Permanent Research Staff *2011 – 2017*
- University of Milano Bicocca** **Milano, Italy**
Senior Postdoctoral Fellow *2009 – 2011*
- University of Zurich** **Zürich, Switzerland**
Postdoctoral Fellow (Forschungskredit Fellow) *2007 – 2009*

HONORS AND AWARDS

- Permanent Full Professorship from the University of Pisa** *(2023, Declined)*
- W3 permanent Full Professorship from the University of Hamburg** *(2021, Declined)*
- ERC consolidator grant** *2017*
- MERAC Prize, Best Early Career Researcher in Theoretical Astrophysics** *2015*
 ○ awarded by the European Astronomical Society ([link](#))
 ○ Motivation: The MERAC prize was awarded to me for my "theoretical and computational contributions to the dynamics of star clusters and galaxies, the reionization epoch, the Galactic centre, and the formation of massive stellar black holes."
 ○ Note: the MERAC prize for the Best Early Career Researcher in Theoretical Astrophysics is awarded every two years to an individual theoretical astrophysicist who achieved outstanding results while working at an European University / Research center and received their PhD < 10 years before the nomination.
- Mention in "Women in Italian astronomy"** *2014*
 ○ My name was included by Francesca Matteucci and Raffaele Gratton in their [review](#) of the most important achievements obtained by female astronomers/astrophysicists in Italy.
- Forschungskredit Fellowship, University of Zurich** *2008 – 2009*
- Gratton Prize** *2007*
 ○ The Gratton Prize is awarded every two years to the best PhD Thesis in Astronomy and Astrophysics in Italy.
- Tacchini Prize** *2007*
 ○ The Tacchini Prize by the Italian Astronomical Society (SAIT) is awarded every year to the best PhD Thesis in Astronomy and Astrophysics in Italy.
- Indirect recognition as supervisor/advisor** *2019 – now*

- My former postdoctoral fellow Manuel Arca Sedda obtained the MERAC prize 2023 for the Best Early Career Researcher in Theoretical Astrophysics;
- My PhD student and former Master student Erika Korb has obtained the Geppina Coppola Prize 2023 for her Master Thesis about "Wolf-Rayet – Black hole binaries";
- My former PhD students Elisa Bortolas and Alessandro A. Trani were both awarded a Marie Curie fellowship in 2023;
- My former postdoc Guglielmo Costa obtained the Lorenzoni Prize 2023 for the best publication led by a young researcher for his publication on the pair-instability mass gap (Costa et al., including Mapelli, 2021, [MNRAS, 501, 4514](#));
- My former PhD students Nicola Giacobbo and Filippo Santoliquido were awarded the Tacchini Prize for the best Italian PhD thesis in Astronomy & Astrophysics (in 2020 and 2023, respectively);
- My former postdoc Mario Spera obtained the "Premio Giovani Ricercatori 2020";
- My former PhD students Elisa Bortolas, Ugo N. Di Carlo and Nicola Giacobbo received a honourable mention by the International Braccini Prize committee for the best international PhD Thesis related to gravitational wave science;
- My former PhD student Elisa Bortolas was awarded the Gratton Prize 2019 for the best Italian PhD thesis in Astronomy & Astrophysics.

SCIENTIFIC HABILITATIONS

Full Professor Habilitation 2018

- Awarded the [Italian National Scientific Habilitation](#) (Abilitazione Scientifica Nazionale) to become a full professor.

Associate Professor Habilitation 2013

- Awarded the Italian National Scientific Habilitation to become an associate professor.

EXTERNAL FUNDING RECORD

During my entire academic career, I obtained **4.383M EUR** as principal investigator (PI) or co-principal investigator (co-PI), and additional **4.374M EUR** as co-investigator (co-I). Here below, I list the details of the main grants.

PRIN INAF (200k EUR for 3 years) 2022

- Title: Pulsar/black-hole systems and other jewels in the casket of globular cluster stellar populations; PI: Andrea Possenti; co-PIs: Michela Mapelli, Cristina Pallanca.

PRIN MIUR (577.5k EUR for 3 years) 2021

- Title: Multimessenger astronomy in the Einstein Telescope Era (METE); PI: Marica Branchesi; co-PIs: Enrico Cappellaro, Michela Mapelli, Michele Punturo. Success rate: 9.5%.

ACROGAL Seal of Excellence Fellowship (150k EUR for 3 years) 2021

- PI: Celeste Artale; Scientific Supervisor: Michela Mapelli. This grant, funded by the University of Padua, is awarded to young researchers who obtained the Seal of Excellence from Horizon 2020. The grant covers the fellowship of Dr Celeste Artale, plus travel and equipment expenses.

GRACE-BH Marie Skłodowska Curie European Fellowship (180k EUR for 2 years) 2021

- PI: Manuel Arca Sedda; Scientific Supervisor: Michela Mapelli. This grant, funded by the Horizon 2020 Marie Skłodowska Curie program of European Commission, covers the fellowship of Dr Manuel Arca Sedda plus travel and equipment expenses.

RISING Marie Skłodowska Curie Global Fellowship (255k EUR for 3 years) 2020

- PI: Mario Pasquato; Scientific Supervisor: Michela Mapelli. This grant, funded by the Horizon 2020 Marie Skłodowska Curie program of European Commission, covers the fellowship of Dr Mario Pasquato plus travel and equipment expenses.

MIAPP proposal

2020

- Coordinators: A. Mérand, H. Boffin, S. Ekstrom, JJ Eldridge, M. Mapelli. The approved program on “The Fundamental Role of Stellar Multiplicity in Stellar Dynamics and Evolution” is scheduled for November 2022.

FWF stand-alone grant FP311540 (320'299.88 EUR for 3 years)

2018

- **PI: Michela Mapelli, 0 co-Is.** Project “PopNeS: Unraveling merging neutron stars and black hole – neutron star binaries with population-synthesis simulations”, funded by the Austrian National Science Foundation (FWF).

ERC Consolidator Grant (1'994'764 EUR for 5 years)

2017

- **PI: Michela Mapelli, 0 co-Is.** Project “DEMOBLACK: Demography of Black Hole Binaries in the Era of Gravitational Wave Astronomy”, funded by the European Research Council (ERC).

”Premiale project” by MIUR (2.144M EUR for 3 years)

2017

- **PI: Gianluca Gemme; > 10 co-Is, including Michela Mapelli.** Project “FIGARO – FOSTERING THE ITALIAN LEADERSHIP IN THE FIELD OF GRAVITATIONAL WAVE ASTROPHYSICS”, funded by the Italian Ministry of Education, University and Research (MIUR).

”Premiale project” by MIUR (1.128M EUR for 2 years)

2017

- **PI: Bianca Garilli; > 10 co-Is, including Michela Mapelli.** Project “MITic – Mining the Cosmos: Big Data and Innovative Italian Technology for Frontier Astrophysics and Cosmology” funded by the Italian Ministry of Education, University and Research (MIUR).

ISSI proposal

2017

- **PI: Christian Boily; 11 co-Is, including Michela Mapelli.** Project “The Evolution of Rich Stellar Populations & Black Hole Binaries”. This grant, funded by the International Space Science Institute – ISSI in Bern, Switzerland, covers the expenses for the organization of three meetings on the proposed subject and aims at consolidating an international collaboration on the study of black hole binaries in star clusters.

Astrofit2 Marie Skłodowska Curie Fellowship (170k EUR for 3 years)

2017

- **PI: Mario Pasquato; Scientific Supervisor: Michela Mapelli.** Project “ARTISTIC – ARTificial Intelligence Search for Intermediate-mass black holes in star Clusters”. This grant, funded by the Horizon 2020 Marie Skłodowska Curie program of European Commission, covers the fellowship of Dr Mario Pasquato plus travel and equipment expenses.

PRIN INAF Project (306k EUR for 3 years)

2017

- **PI: Andrea Possenti; > 10 co-Is including Michela Mapelli.** Project “Opening a new era in pulsar and compact-object science with MeerKat”, funded by INAF.

MERAC Project (150k EUR for 3 years)

2015

- **PI: Michela Mapelli; 0 co-Is.** Project “The physics of gas and protoplanetary discs in the Galactic centre: predictions for SKA and ALMA”, funded by Fondation MERAC (100k EUR) and by INAF (50k EUR).

INAF PhD Project (70k EUR for 3 years)

2015

- **PI: Michela Mapelli; 0 co-Is.** Project “Hydrodynamical simulations of clustered star formation and the young star clusters of the Gaia ESO survey”, funded by INAF to hire a PhD student.

PRIN INAF Project (32k EUR for 2 years)

2014

- **PI: Michela Mapelli; > 10 co-Is.** Project “Star formation and evolution in galactic nuclei”, funded by INAF.

- FIRB Future in Research Project (958'490 EUR for 3 years)** *2012*
- **3 co-PIs: Marica Branchesi (national coordinator), Michela Mapelli & Massimiliano Razzano.** Project "New perspectives on the violent Universe: unveiling the physics of compact objects with joint observations of gravitational waves and electromagnetic radiation", funded by the MIUR. The FIRB (Future in Research) was an Italian granting scheme for excellent young researchers. Our project was the only astrophysical proposal (PE9) funded in the 2012 FIRB call (success rate < 5%).
- CONACYT Project (661.3k PESOS for 2 years)** *2012*
- PI: Emanuele Bertone (INAOE, Puebla, Mexico); > 10 co-Is including Michela Mapelli. Project "Nearby and distant spheroids: cutting-edge theoretical tools for the analysis of stellar populations", funded by the Mexican Science Foundation (Consejo Nacional de Ciencia y Tecnología).
- PRIN INAF Project (41k EUR for 2 years)** *2012*
- PI: Luca Zampieri; > 10 co-Is, including Michela Mapelli. Project "Challenging Ultraluminous X-ray sources", funded by INAF.
- Milano Bicocca Fellowship (72k EUR for 4 years)** *2009*
- **PI: Michela Mapelli; 0 co-Is.** Project "Understanding ring galaxy formation", funded by the University of Milano Bicocca.
- Forschungskredit Fellowship (60k EUR for 1 year)** *2008*
- **PI: Michela Mapelli; 0 co-Is,** funded by the University of Zurich.

TEACHING EXPERIENCE

COURSES AS PRIMARY LECTURER for Bachelor and Master students.....

- Compact Object Astrophysics** *2023–now*
- Specialist course for Master students in Physics and Astronomy at Heidelberg University (~ 10 students per year).
 - I teach 4 hours/week, corresponding to the entire course.
- Computational Astrophysics** *2020–2023*
- Elective course for Master students in Physics of Data at the University of Padua (~ 20 students per year).
 - I teach 48 hours/yr, corresponding to the entire course.
 - Median evaluation of the course by the students: 9/10
- Mathematical and Numerical Methods** *2019–2023*
- Fundamental course for Master students in Astrophysics and Cosmology at the University of Padua (~ 70 students per year).
 - I teach 48 hours/yr, corresponding to the entire course.
 - Median evaluation of the course by the students: 9/10
- Laboratory of Computational Physics, Part B** *2019–2023*
- Fundamental course for Master students in Physics of Data at the University of Padua (~ 60 students per year).
 - I teach 24 hours/yr, corresponding to half of the course.
 - Median evaluation of my part of the course by the students: 9/10
- General Physics 1** *2018–2019*
- Fundamental course for Bachelor students in Electronic Engineering and Biomedical Engineering at the University of Padua (~ 200 students per year).
 - I taught 60 hours/yr, corresponding to more than half of the frontal lectures.
 - Median evaluation of my part of the course by the students: 7/10

Gravitational Wave Astrophysics 2017–2018

- Elective course for Master students in Physics at the University of Innsbruck.
- I taught 30 hours/yr, corresponding to the entire course.

COURSES AS TEACHING ASSISTANT for Bachelor and Master students.....

Stellar Evolution 2009–2011

- Course for Master students in Physics at the University of Milano Bicocca, Curriculum Astrophysics.

Galactic Dynamics 2009–2011

- Course for Master students in Physics at the University of Milano Bicocca, Curriculum Astrophysics.

Theoretical Astrophysics 2008–2009

- Course for Master students in Physics at the University of Zurich.

Proseminar Theoretical Physics 2007–2009

- Course for Bachelor students in Physics at the University of Zurich.

Introduction to Astrophysics 2007–2009

- Course for Bachelor students in Physics and for non-physics Master students at the University of Zurich.

COURSES AS PRIMARY LECTURER for PhD students.....

Gravitational Wave Astrophysics 2020–2023

- Course for PhD students in Astronomy and in Physics at the University of Padua.
- This course is held every two years and consists of 16 hours.

N-body techniques for astrophysics 2015–2023

- Course for PhD students in Astronomy and in Physics at the University of Padua.
- This course is held every two years and consists of 16 hours.

Collisional dynamics in stellar systems 2012–2017

- Course for PhD students in Astronomy at the University of Padua.
- This course was held every two years and consisted of 10 hours.

INVITED LECTURE CYCLES.....

Compact Object Formation 2020–now

- Invited Course for PhD students in Astro-Particle Physics at the **Gran Sasso Science Institute (GSSI)**
- This course is held every year and consists of 10 hours.

Dynamics of Stars and Black Holes in Dense Stellar Systems April 2018

- Invited Course for PhD students in Astrophysics at the **International School for Advanced Studies (SISSA)**
- This course consisted of 8 hours.

INVITED LECTURES.....

Amaldi Research Center Summer School” **Paestum, Italia**
Invited Lecture on "Binary Compact Objects” *September 5–9 2022*

- International school organized by the Amaldi Research Center (Rome); main target: PhD students.

International School on Multi-Messenger Astrophysics **Asiago, Italy**
Invited Lecture on "Binary Compact Objects” *January 14–23 2020*

- Main target: PhD students.

ISAPP School on The Dark Side of the Universe

Invited Lecture on "Gravitational Wave Astronomy"

Heidelberg, Germany

May 28–June 4 2019

- Main target: PhD students.

PHAROS School on Multimessenger Physics and Astrophysics

Invited Lecture on "Binary Compact Objects"

Jena, Germany

March 11–15 2019

- Main target: PhD students.

International School of Physics "Enrico Fermi"

Two invited Lectures on "Black holes physics and astrophysics"

Varenna, Italy

July 2–12 2017

- Course 200 - Gravitational Waves and Cosmology; scientific organizers: Eugenio Cocchia, Nicola Vittorio, and Joseph Silk.

- Main target: PhD students.

PhD School "Astrophysical Probes of Fundamental Physics"

Invited Lecture on "Demography of stellar mass black holes"

Ferrara, Italy

September 5–9 2016

- Scientific organizers: Piero Rosati, Cristiano Guidorzi, Paolo Natoli.

- Main target: PhD students.

Binational Heraeus Summer School Series

Invited Tutorial on "How to make star clusters out of gas"

Firenze, Italy

August 23–30 2016

- Binational Heraeus Summer School Series for Teacher Students and Teachers "Star and planet formation" at the Arcetri Astronomical Observatory, Firenze, Italy.

- This school springs from the collaboration of the Universities of Firenze, Heidelberg, Jena and Padua.

- Main target: High-school teachers and Master students interested in starting a career as high-school teachers.

The Gaia course for PhD students

Invited Lecture on "Dynamics of open clusters and star forming regions"

Bologna, Italy

June 6–10 2016

- Scientific organizers: A. Bragaglia, C. Cacciari, G. Clementini, F. R. Ferraro.

- Main target: PhD students.

Binational Heraeus Summer School Series

Invited Lecture on "How to be ready for multi-messenger astronomy"

Jena, Germany

Aug. 31–Sept. 4 2015

- Binational Heraeus Summer School Series for Teacher Students and Teachers "Gravitational Wave Universe" at the University of Jena, Germany.

- This school springs from the collaboration of the Universities of Firenze, Heidelberg, Jena and Padua.

- Main target: High-school teachers and Master students interested in starting a career as high-school teachers.

Binational Heraeus Summer School Series

Invited Lecture on "Gravitational wave sources and electromagnetic counterparts"

Padua, Italy

June 19 2015

- Binational Heraeus Summer School Series for Teacher Students and Teachers "Gravitational Wave Universe".

- This school springs from the collaboration of the Universities of Firenze, Heidelberg, Jena and Padua.

- Main target: High-school teachers and Master students interested in starting a career as high-school teachers.

Binational Heraeus Summer School Series

Invited Lecture on "Star formation around super-massive black holes"

Padua, Italy

September 1–6 2014

- Binational Heraeus Summer School Series for Teacher Students and Teachers "Space, Time and Gravitation, The case of Active Galactic Nuclei".

- This school springs from the collaboration of the Universities of Firenze, Heidelberg, Jena and Padua.

- Main target: High-school teachers and Master students interested in starting a career as high-school teachers.

School "Challenging ultra-luminous X-ray sources"

Milano Bicocca, Italy

Invited Lecture on "Dynamics and ultraluminous X-ray sources"

January 30–31 2014

- o Main target: PhD and Master students.

Summer school "High performance scientific computing"

Padua, Italy

Invited Lecture on "Direct N-body Codes for Astrophysics: from GRAPE to GPU"

Sept. 16–19 2013

- o This school was organized by the Strategic Research Project AACSE - Algorithms and Architectures for Computational Science and Engineering, Department of Information Engineering, University of Padua
- o Main target: PhD and Master students in Physics and Engineering.

RESEARCH ADVISING (since 2008):

Bachelor students: 28.

Cedric Huwyler (2008, University of Zurich), Davide Fiacconi (2010, University of Milano Bicocca), Marcello Gomitoni (2010, University of Milano Bicocca), Giovanni Bruno (2010, University of Milano Bicocca), Alessandro A. Trani (2011, University of Milano Bicocca), Ugo N. Dicarolo (2014-2015, University of Padua), Enrico Montanari (2015-2016, University of Padua), Giulio Dondi (2016, University of Modena e Reggio Emilia), Erica Greco (2017, University of Padua), Nicola Gaspari (2018, University of Padua), Erik Richter-Alten (2018, University of Innsbruck), Alberto Brentegani (2019, University of Padua), Alberto Magaraggia (2019, University of Padua), Francesco Spezzati (2019, University of Padua), Lorenzo Merli (2019, University of Padua), Marianna Zerajic De Giorgio (2020, University of Padua), Erika Korb (2020, University of Padua), Irma Berviglieri (2021, University of Padua), Daria Murgia (2021, University of Padua), Nicolò Belgiovine (2021, University of Padua), Filippo Simonato (2021, University of Padua), Alessia Pascoli (2021, University of Padua), Simonetta Zotto (2022, University of Padua), Diego Bonato (2022, University of Padua), Martina Cacciola (2022, University of Padua), Lorenzo Noel Gorza (2023, University of Padua), Matteo Lovato (2023, University of Padua), Sofia Mesini (2023, University of Padua).

Master students: 36.

Stefano Cotini (2010 – 2011, University of Milano Bicocca), Mattia Villani (2010 – 2011, University of Pavia), Davide Fiacconi (2011 – 2012, University of Milano Bicocca), Alessandro A. Trani (2013, University of Milano Bicocca), Andrea Moretti (2014 – 2015, University of Milano Bicocca), Alessandra Ferri (2014 – 2015, University of Milano Bicocca), Matteo Mazzarini (2015 – 2016, University of Padua), Benjamin Czaja (2015 – 2016, Astromundus student, University of Padua), Nicola Giacobbo (2016, University of Padua), Ugo Niccolò Di Carlo (2017, University of Padua), Mattia Toffano (2018, University of Padua), Enrico Montanari (2018 – 2019, University of Padua), Piero Trevisan (2018 – 2019, University of Padua), Filippo Santoliquido (2019, University of Padua), Marco Dall'Amico (2019 – 2020, University of Padua), Nicola Gaspari (2019 – 2020, University of Padua), Erica Greco (2020, University of Padua), Riccardo Baldo (2020 – 2021, University of Padua), Emanuele Maria Ventura (2021, University of Padua), Jacopo Tissino (2021, University of Padua), Roberta Rufolo (2020 – 2021, University of Padua), Cecilia Sgalletta (2021, University of Padua), Lorenzo Merli (2021 - 2022, University of Padua), Erika Korb (2021 - 2022, University of Padua), Benedetta Mestichelli (2021 - 2022, University of Padua), Maria Paola Vaccaro (2021 - 2022, University of Padua), Francesco Iraci (2021 - 2022, University of Padua), Francesco Flora (2021 - 2022, University of Padua), Maria Francesca Cecchi (2021 - 2022, University of Padua), Daxal Hemendrakumar Mehta (2022-2023, University of Padua), Juan Manuel Pacheco Arias (2022-2023, University of Padua), Vivek Kashyap Janardhana (2022-2023, University of Padua), Raffaele Scala (2023, University of Padova), Bera Anneli Dahl-Latinen (2022-2023, Norwegian University of Science and Technology & University of Padua), Jake Jackson (2023, University of Padua), Angel Bashyal (2023, Tribhuvan

University, Nepal)

PhD students: 11.

Brunetto M. Ziosi (2012 – 2015, University of Padua; now permanent IT staff in a private company), Alessandro A. Trani (2013 – 2017, SISSA, external supervisor; now MSCA fellow in Copenhagen), Elisa Bortolas (2015 – 2018, University of Padua; now MSCA fellow at Princeton University and assistant professor at the University of Milano Bicocca), Nicola Giacobbo (2016 – 2019, University of Padua; now permanent IT staff in a private company), Ugo Niccolò Di Carlo (2017 – 2021, University of Insubria; now fixed-term researcher at SISSA), Filippo Santoliquido (2019 – 2023, University of Padua; now postdoctoral fellow at GSSI), Stefano Tornamenti (2019 – 2023, University of Padua, now postdoctoral fellow at Heidelberg University), Marco Dall’Amico (2020 – now, University of Padua), Cecilia Sgalletta (2021 - now, SISSA, external supervisor), Erika Korb (2022 - now, University of Padua), Paola Vaccaro (2023 - now, Heidelberg University).

Current Postdocs: 7.

Dr. Gaston Escobar (2021 – now, ERC consolidator grant); Dr. Giuliano Iorio (2019 – now, ERC Consolidator grant); Dr. Elena Lacchin (2023 – now, ERC Consolidator grant); Dr. Mario Pasquato (2021 – now, MSCA Global fellow); Dr. Carole Périgois (2021 – now, ERC Consolidator grant); Dr. Stefano Rinaldi (2023 – now, ERC Consolidator grant); Dr. Stefano Tornamenti (2023 – now, ERC Consolidator grant).

Former Postdocs: 12.

Dr. Manuel Arca Sedda (2022 – 2023, MSCA European fellow; now Assistant professor at GSSI); Dr. M. Celeste Artale (2018 – 2019, FWF and then Seal of Excellence fellow; now associate professor at the Universidad Andrés Bello, Santiago, Chile); Dr. Alessandro Ballone (2016 – 2022, INAF-OAPd, funded by my 2015 MERAC grant and since 2019 by my ERC Consolidator Grant; now fixed-term researcher at INAF); Dr. Yann Bouffanais (2018 – 2021, ERC Consolidator grant; now permanent IT staff in a private company); Dr. Guglielmo Costa (2019 – 2022, ERC Consolidator Grant, now postdoctoral fellow in Lyon); Dr. Ugo Niccolò Di Carlo (2020 – 2021, ERC Consolidator Grant; now fixed-term researcher at SISSA); Dr. Nicola Giacobbo (2019 – 2020, ERC Consolidator grant; now permanent IT staff in a private company); Dr. Mario Pasquato (2017 – 2020, INAF-OAPd, independent Astrofit2 Marie Curie grant; now MSCA fellow); Dr. Sara Rastello (2019 – 2023, ERC Consolidator grant, now Beatriu de Pinós post-doctoral fellow at ICCUB); Dr. Filippo Santoliquido (2023, ERC Consolidator grant, now postdoctoral fellow at GSSI); Dr. Nadeen Sabha (2018 – 2019, now postdoc at the University of Innsbruck); Dr. Mario Spera (2014 – 2018, INAF-OAPd, funded by my 2012FIRB grant; now associate professor at SISSA).

ERASMUS students: 2.

Tom Kimpson (2015, University of Durham, UK), summer project about "Hierarchical triple systems: a gravitational wave factory and a powerful laboratory for general relativity"; Adam Dakroury (2016-2017, University of Surrey, UK), 1-yr project about "SEVN: A new binary evolution code to study gravitational wave events"

Summer (or similar) internships: 5.

Alice Doimo (2020, University of Padua); Cecilia Sgalletta (2020, University of Padua); Giorgio Mentasti (2021, University of Padua); Bera Anneli Dahl-Lahtinen (2022-2023, Norwegian University of Science and Technology, Norway); Angel Bashyal (2022-2023, Tribhuvan University, Nepal)

Note: most of my former Master and PhD students went to prestigious national and international universities for their PhD and postdoctoral fellowships (e.g., Max Planck Institute in Heidelberg; Space Telescope Science Institute in Baltimore; University of Amsterdam, University of Cambridge, University of Marseille, University of Nijmegen, University of Tokyo, University of Zurich, etc), or

found a permanent job in private IT companies. My former PhD student, Dr Elisa Bortolas, is now a tenure-track assistant professor at the University of Milano Bicocca (since 2023).

Four of my former postdocs have been awarded tenure-track/tenured positions. My first postdoctoral fellow, Dr Mario Spera, is now tenured associate professor at SISSA. Dr M. Celeste Artale is now tenured associate professor position at Andrés Bello University. Dr Manuel Arca Sedda has started a tenure-track position at GSSI in Spring 2023. Dr Mario Pasquato will become permanent researcher at INAF Milano in 2024.

COLLOQUIA AND TALKS AT CONFERENCES:

I was invited to give **51 colloquia** at international research institutes and universities. I also gave > 80 oral presentations at international conferences, among which **68 invited talks and review talks**. For my additional 15 invited lectures, see the previous section on Teaching Experience.

List of the invited colloquia/webinars:.....

- 51 - colloquium at the University of Nottingham, May 22nd 2024 (forthcoming)
- 50 - London-Oldenburg Relativity Seminar, University of London-Oldenburg, January 17th 2024 (forthcoming)
- 49 - colloquium at the Institut d'Astrophysique de Paris, April 14th 2023
- 48 - colloquium at the University of Southern California, April 7th 2023, via zoom
- 47 - Colloquium at Sun Yat-sen University, China, about "Binary black holes from star evolution", May 12nd 2022, via zoom
- 46 - Albert Einstein Institute Colloquium, Potsdam, Germany, about "The next generation gravitational-wave detectors", April 27th 2022
- 45 - Arcetri Astrophysics Colloquium, Florence, Italy, invited colloquium about "Formation pathways of gravitational wave sources", March 17 2022
- 44 - Munich Joint Astronomy Colloquium, Munich, Germany, invited colloquium about "Populations of binary black holes", March 10 2022
- 43 - Vienna University, Vienna, Austria, Vienna Astrophysics Colloquium about "Binary black holes across cosmic time", February 14 2022, hopefully first colloquium in presence after covid-19 emergency (forthcoming)
- 42 - Webinar on "GWTC-2.1", on behalf of the LIGO-Virgo collaboration, November 15 2021, [youtube link](#) (online, > 200 participants)
- 41 - La Sapienza University, Rome, Italy, invited ARC colloquium about "Binary black holes", May 20 2021 (done remotely because of the covid-19 emergency)
- 40 - Heidelberg Joint Astronomical Colloquium, invited talk about "The riddle of binary black hole formation", May 18 2021 (done remotely because of the covid-19 emergency, [youtube link](#))
- 39 - CCA, Flatiron Institute, New York, US, invited talk at the compact object meeting about "Hierarchical mergers and intermediate-mass black holes", May 13 2021 (done remotely because of the covid-19 emergency)
- 38 - Massachusetts Institute of Technology (MIT), US, invited colloquium about "Binary black holes across the Universe", March 30 2021 (done remotely because of the covid-19 emergency)
- 37 - APC, Paris, France, invited colloquium about "Binary black holes in the mass gap", February 26

- 2021 (done remotely because of the covid-19 emergency)
- 36 – IRAP, Toulouse, France, invited colloquium about “The multifaceted formation of binary black holes”, January 21 2021 (done remotely because of the covid-19 emergency)
 - 35 – Lund University, Lund, Sweden, invited colloquium about “Binary black holes”, October 29 2020 (this talk has been done remotely because of the covid-19 emergency)
 - 34 – University of Florida, Gainesville, FL, US, invited colloquium about “Black holes in the pair instability mass gap”, October 28 2020 (this talk has been done remotely because of the covid-19 emergency)
 - 33 – Webinar on “GW190521”, on behalf of the LIGO-Virgo collaboration, September 3 2020, [youtube link](#) (this talk has been done remotely because of the covid-19 emergency, > 500 participants)
 - 32 – Cardiff University, Cardiff, UK, invited lunch talk about “Stellar Black Hole Formation and Dynamics across Cosmic Time”, June 25 2020 (this talk has been done remotely because of the covid-19 emergency)
 - 31 – INAF, Padua, Italy, invited lunch talk about “Binary compact objects across cosmic time”, May 19 2020 (this talk has been done remotely because of the covid-19 emergency)
 - 30 – Lancaster University, UK, invited Colloquium about “Binary compact objects across cosmic time”, May 5 2020 (this talk has been done remotely because of the covid-19 emergency)
 - 29 – ESO, Garching, Germany, invited Web Lunch Talk about “Binary compact objects across cosmic time”, April 7 2020 (this talk was done remotely because of the covid-19 emergency)
 - 28 – Institute for Theory and Computation, Center for Astrophysics, Harvard & Smithsonian, Cambridge, Massachusetts, US, invited colloquium about “The mass and dynamics of black holes”, October 24 2019
 - 27 – GSSI, L’Aquila, Italy, invited colloquium about “Demography of black holes across cosmic time”, December 5 2018
 - 26 – Albert Einstein Institute, Potsdam, Germany, invited colloquium about “Demography of compact objects in the era of gravitational-wave astronomy”, May 30 2018
 - 25 – University of Wien, Austria, invited colloquium about “The astrophysics of compact object binaries”, June 22 2018
 - 24 – University of Leiden, The Netherlands, invited colloquium about “The demography of black holes in the era of gravitational-wave astronomy”, May 17 2018
 - 23 – Inaugural Lecture for the New Professorship, University of Innsbruck, “The demography of compact objects in the era of gravitational-wave astronomy”, April 10 2018
 - 22 – University of Warsaw, Poland, invited colloquium about “The demography of black holes”, March 14 2018
 - 21 – Cardiff University, UK, invited colloquium about “Formation and evolution of binary black holes”, February 21 2018
 - 20 – University of Trento, invited colloquium about “What are the formation channels of black hole binaries?”, January 11 2018
 - 19 – Bologna Astronomical Observatory, Italy, invited colloquium about “Few good reasons to not get bored of star clusters”, May 4 2017
 - 18 – Munich Joint Astronomy Colloquium, Munich, Germany, invited colloquium about “The dynamics

of stellar systems”, November 24 2016

- 17 – Max Planck Institut fuer Radioastronomie (MPIfR), Bonn, Germany, invited colloquium about “The dance of stars in galactic nuclei”, January 25, 2016
- 16 – Osservatorio Astrofisico di Arcetri, Firenze, Italy, “Star formation activity in the Galactic Centre”, October 29, 2015
- 15 – ESO, Garching, Germany, Informal discussion (invited black board colloquium) on “Young star clusters: when collisional dynamics meets stellar evolution”, July 29, 2015
- 14 – Astronomical Observatory, Rome, Italy, The nature of the dusty object G2, May 5, 2015
- 13 – University of Surrey, UK, The violent life of the Galactic centre, May 22, 2014
- 12 – SISSA/ISAS, Trieste, Italy, The sarabande of stars and black holes in dense young star clusters, February 18, 2014
- 11 – IASF Bologna, Bologna, Italy, New perspectives on the violent Universe: unveiling the physics of compact objects with joint observations of gravitational waves and electromagnetic radiation, December 18, 2013
- 10 – University “La Sapienza”, Rome, Italy, Simulating young star clusters with different metallicity: impact on structural evolution and stellar exotica, May 6, 2013
- 9 – IRAP, Toulouse, France, Massive stellar black holes and intermediate-mass black holes: formation pathways and observational fingerprints, March 7, 2013
- 8 – INAF, Brera Observatory (Milano, Italy), Dynamics of massive stellar black holes, November 23, 2011
- 7 – Physics and Astronomy Department, University of Padua (Padua, Italy), Galaxy clashes and perturbed galaxies, September 8, 2011
- 6 – University of Bologna and INAF-Bologna Observatory (Bologna, Italy), Massive stellar black holes in low-metallicity environments, November 18, 2010
- 5 – Institute for Theoretical Physics, University of Zurich (Zurich, Switzerland), Massive stellar black holes, September 22, 2010
- 4 – INAF, Osservatorio Astronomico di Brera-Merate (Milan, Italy), “Dynamics of peculiar galaxies”, March 27, 2009
- 3 – Institute for gravitational physics and geometry, Penn State University (US), Sources and Simulations Seminars, “Dynamical Constraints on Intermediate Mass Black Holes”, February 2, 2006
- 2 – Theoretical astrophysics group, Northwestern University (US), “Dynamical Constraints on Intermediate Mass Black Holes”, January 29, 2006
- 1 – Institute of Astronomy, Cambridge (UK), “Extragalactic meetings”, January 9, 2006, “Decaying cold and warm dark matter”

List of invited talks and invited review talks at conferences (I am not showing the contributed talks for the sake of brevity).....

- 68 - “2024 Alpbach workshop on clouds, star clusters & black holes”, Alpbach, Austria, June 10 – 14 2024, invited speaker (forthcoming)
- 67 - Workshop “Gravitational waves: a new ear on the chemistry of galaxies”, Lorentz Center, Leiden, The Netherlands, April 29 – May 3 2024, senior people only by invitation (forthcoming)

- 66 - conference Black Holes and Cosmology 2024, 11-15 March 2024, Nassau, The Bahamas, invited plenary speaker (forthcoming)
- 65 - GRASP conference, 24–27 October 2023, Pisa, Italy, invited speaker
- 64 - XXV SIGRAV conference, 4–8 September 2023, Trieste, Italy, invited speaker
- 63 - Workshop "Gravitational-wave populations: what's next?", July 10–14 2023, Milano, Italy, invited speaker
- 62 - MERAC Symposium, EAS conference, July 10–11 2023, Krakow, Poland, invited speaker
- 61 - Conference "A multi-wavelength view on globular clusters near and far: from JWST to the ELT", July 3–7 2023, Sexten Italy, only by invitation
- 60 - Workshop "The Renaissance of Stellar Black-Hole Detections in The Local Group", Lorentz Center, Leiden, June 26 – 30 2023, The Netherlands, senior people only by invitation
- 59 - Workshop "New Horizons in Primordial Black Hole physics" (NEHOP), June 19 – 21 2023, Naples, Italy, invited speaker on Stellar-born binary black holes
- 58 - 10th Miniquasar Workshop, May 22-26 May 2023, Heraklion, Crete, Greece, invited review talk on binary black hole mergers and LIGO – Virgo data
- 57 - ISSI Forum on "Lunar gravitational wave observations", October 5–6 2022, ISSI, Bern, Switzerland, invited talk and discussion about "Intermediate-mass black holes: impact and open questions"
- 56 - 108° Congresso della Società Italiana di Fisica (SIF), September 11-16 2022, Milano, Italy, invited talk on "Populations of GW sources"
- 55 - XXXI IAU General Assembly, Meeting of Division D on "Across the Mass Spectrum of Neutron Stars and Black Holes", August 2-11 2022, Seoul, Korea, invited review talk about "The formation of black holes in the mass gap"
- 54 - Conference "PASCOS (Particles Strings Cosmology)", July 25 – 29 2022, Heidelberg, Germania, invited plenary talk on "Gravitational Waves"
- 53 - Cospar 2022, 44th General Assembly, conference event "X- and Gamma-ray Counterparts of New Transients in the Multi-messenger Era", July 16 – 24 2022, Athens, Greece, solicited talk about "Populations of binary mergers"
- 52 - Meeting "New Directions in Radio Astronomy", May 11 – 13 2022, Bonn, Germany, invited talk about "Computational Astrophysics and Binary Black hole Populations"
- 51 - Conference "Growing Black Holes: Accretion and mergers", 19-24 April 2022, Kathmandu, Nepal, invited review talk on "The cosmic evolution of compact object binaries" (postponed because of covid-19)
- 50 - APS April Meeting, April 9 – 12 2022, New York, US, invited review talk on "Formation channels of GW190521" (forthcoming)
- 49 - "FERO 10th meeting", March 30th - April 1st 2022, Toulouse, France, invited review talk about "Intermediate-mass black holes"
- 48 - Workshop "Source Inference and Parameter Estimation in Gravitational Wave Astronomy", November 15 – 19 2021, Part of the Long Program Mathematical and Computational Challenges in the Era of Gravitational Wave Astronomy, IPAM, UCLA, Los Angeles, US
- 47 - Conference EAS 2021, Symposium "The Birth, Life and Death of Black Holes", June 28 – 29 2021, Leiden, The Netherlands, invited review talk on Black hole populations, held remotely because of

covid-19

- 46 – "Gravitational Wave Early Career Scientist Funding Workshop", June 22-23 2021, online workshop, invited talk and round table on "Managing a project, coordinating a group and supervising students" ([link to the slides](#))
- 45 – Conference "Le Rencontres de Moriond - Gravitation", March 9 – 11 2021, keynote speaker, invited review talk on "Binary black hole formation", held remotely because of covid-19
- 44 – Conference "Miami 2020", Miami, US, December 10 2020, invited talk on "Black holes in the pair instability mass gap" (the conference moved to an online format because of the covid-19 emergency)
- 43 – Workshop "Newest results from LIGO – Virgo – KAGRA", Copenhagen, November 18 2020, invited talk on the Formation channels of GW190521 (the workshop was organized in a dual format because of the covid-19 emergency)
- 42 – "Virtual Iberian Gravitational Wave Meeting", October 19 – 20 2020, invited talk on "Demography of binary compact objects: from theory to data" (held online because of the covid-19 emergency)
- 41 – Conference "EAS 2020", Symposium on "What have we learned from the observed population of gravitational wave sources?", 2 – 3 July 2020, Leiden, The Netherlands, invited review talk on "The formation of isolated compact object binaries" – this conference has been held online because of the covid-19 emergency
- 40 – Conference "Gravitational Wave Physics and Astronomy: Genesis", 10 – 12 February 2020, Kobe, Japan, invited review talk on "Formation mechanisms of merging BH binaries"
- 39 – Workshop "Black Holes and Gravitational Waves", December 16 – 20 2019, Leiden, The Netherlands, invited talk on the Dynamics of black holes
- 38 – Workshop "Strong gravitational phenomena and tests of gravity with current and future experiments", August 28 – 30 2019, Saint Flour, France, invited review talk on "Challenges of modelling the evolution of black hole binaries, and their connection with astrophysical observations"
- 37 – Conference "Merging Visions: Exploring Compact-Object Binaries with Gravity and Light", June 24 – 27 2019, Kavli Institute for Theoretical Physics, UC Santa Barbara, California, US, invited talk on "Black hole dynamics"
- 36 – EWASS 2019, Special Session on "The dynamics of stellar clusters: simulations and observations at low/high redshifts", Lyon, France, June 24 – 28 2019, invited talk on "Hydrodynamical simulations of star cluster formation"
- 35 – XVIII International Workshop on Neutrino Telescopes, Venice, Italy, March 18 – 22 2019, invited talk on "Lessons learned from GW170817 and what next"
- 34 – Gravitational Waves, Black Holes and Fundamental Physics, EU COST meeting, Athens, Greece, January 21 – 24 2019, invited review talk on black hole dynamics
- 33 – The Central Arcsecond: Towards Testing General Relativity in the Galactic Center Sunday to Saturday, October 28 – November 3, 2018, Schloss Ringberg, Bavaria, Germany, invited talk
- 32 – 68th Annual Meeting of the Austrian Physical Society, Graz, Austria, September 11 – 14 2018, Invited plenary talk
- 31 – Symposium IAU 346: High-mass X-ray binaries: illuminating the passage from massive binaries to merging compact objects, as part of the XXX IAU General Assembly, Wien, Austria, 20 – 31 August 2018, invited talk

- 30 – Workshop “Star Clusters around the Milky Way and in the Local Group (Observations, Dynamics, Modelling, Supercomputing)”, Collaborative Research Center (SFB881) at the University of Heidelberg, Aug. 15-17, 2018, invited speaker
- 29 – Second Workshop “Young Stellar Populations, their Evolution & the Statistics of Black Hole Binaries”, ISSI, Bern, Switzerland, July 8 – 12 2018, invited speaker
- 28 – Meeting “Finding Extreme Relativistic Objects”, Heraklion, Crete, Greece, 23-25 May, 2018, invited talk
- 27 – APS April meeting, Division of Gravitational Physics, Session on “Gravitational Wave Sources: Compact Binary Formation Scenarios”, Columbus, Ohio, US, 14-17 April 2018, invited talk
- 26 – Workshop “Young Stellar Populations, their Evolution & the Statistics of Black Hole Binaries”, ISSI, Bern, Switzerland, November 13 – 17 2017, invited speaker
- 25 – Amaldi 12 conference on Gravitational Waves, Pasadena, CA, USA, July 9 – 14 2017, invited plenary talk on “GW Coalescing Binary detections: impact for Astrophysics, any new results”
- 24 – ESO workshop “The Impact of Binaries on Stellar Evolution”, Garching, Germany, July 3 – 7 2017, invited review talk on “The Maxwell’s demon of star clusters, aka the impact of binaries on N-body system evolution”
- 23 – EWASS 2017, Symposium on “The multifrequency gravitational wave universe”, Prague, Czech Republic, June 26 – 30 2017, invited review talk on “Dynamical origin of compact object binaries”
- 22 – Conference “New Frontiers in Gravitational-Wave Astrophysics”, June 19 – 22 2017, Rome, Italy, invited talk on “The mass spectrum and dynamics of double black hole binaries”
- 21 – Conference “631. WE-Heraeus-Seminar: Stellar aggregates over mass and spatial scales”, Dec. 5-9, 2016, Bad Honnef, Germany, invited talk on “Near the monster: formation and dynamics of stars in galactic nuclei”
- 20 – Meeting “The transient and variable sky in the era of gravitational wave astronomy” of the Royal Astronomical Society, October 26 – 27 2016, Chicheley Hall, London, UK, invited talk on “Dynamical formation of compact binaries”
- 19 – Meeting GR100+1 for the inauguration of the Academic Year at University of Milano Bicocca, October 24 2016, Milano, Italy, invited talk on “Merging black holes: how do they form?”
- 18 – SIF (Società Italiana Fisica), 102° National Meeting, September 26 – 30 2016, Padua, Italy, invited talk
- 17 – Star clusters: from Infancy to Teenagehood, August 8-12 2016, Heidelberg, Germany, invited review talk about “The dynamics of young star clusters: a happy marriage between simulations and the Gaia-ESO survey”
- 16 – What about computing @ INAF?, June 20 – 21 2016, Monte Mario, Rome, Italy, invited talk
- 15 – ULXs and their environment, June 13-16 2016, Strasbourg, France, invited talk
- 14 – INAF after GW150914, April 11 2016, Monte Mario, Rome, Italy, invited talk
- 13 – GES meeting 2015, December 1- 4 2015, Vilnius, Lithuania, invited talk
- 12 – EWASS 2015, Plenary Talk for the MERAC prize, June 22-26 2015, La Laguna, Tenerife, Canary Islands, Spain, invited talk
- 11 – EWASS 2015, Special Session “3D view on interacting and post-interacting galaxies from clusters

- to voids”, June 22-26 2015, La Laguna, Tenerife, Canary Islands, Spain, invited talk
- 10 – Black holes in dense star clusters, January 17-22 2015, Aspen, US, invited participant, talk on “Life and death of stellar discs around supermassive black holes”
 - 9 – Astro-GR@Rome, “Gravitational waves and electromagnetic observations of dense stellar systems”, July 14-18 2014, Rome, Italy, invited talk
 - 8 – Science Workshop on “ULXs - Implications for our View of the Universe”, Lorentz Center, Leiden, The Netherlands, March 31- April 4, 2014, invited review talk
 - 7 – Meeting “Challenging ultraluminous X-ray sources”, University of Milano Bicocca, Milano, Italy, January 30-31 2014, invited talk
 - 6 – High Energy Tidal Disruption Events: Looking at the Future, Favignana, Italy September 23-26, 2013, invited talk
 - 5 – 1st Science Workshop of the Gaia Italia Community, Science with Gaia: revising the Italian selection of main themes, Bologna, Italy, December 12-14 2011, invited talk
 - 4 – Aspen Summer Meeting, Stellar and Intermediate Mass Black Holes: Gravitational Physics and Radiation Sources Across the Universe”, Aspen, CO, US, June 6-26, 2011, invited participant, blackboard talk
 - 3 – “LI congresso della Società Astronomica Italiana”, Firenze, Italy, April 17-20 2007, invited talk (Tacchini prize)
 - 2 – “Eleventh Marcel Grossmann Meeting”, Berlin, Germany, July 24-29 2006, invited talk
 - 1 – “SNAC 2006” (Sterile Neutrinos in Astrophysics and Cosmology), Crans-Montana, Switzerland, March 25-29 2006, invited talk

ORGANIZATION OF CONFERENCES AND WORKSHOPS:

- SOC member, “Galactic Center Workshop 2023”, Granada, Spain, April 24-28, 2023.
- Co-coordinator of the MIAPP program “The Fundamental Role of Stellar Multiplicity in Stellar Dynamics and Evolution”, MIAPP, Garching, November 2022
- Co-chair of the workshop “Physics and Astrophysics at the Extreme” (PAX) VIII, August 1 – 3 2022. Boston, MA, US
- Co-chair of the workshop “Physics and Astrophysics at the Extreme” (PAX) VII, August 23 – 27 2021, online only because of covid-19 emergency
- Member of the SOC of “Where are the BH-NS binaries?”, Special Session at the EAS 2021, Leiden, The Netherlands, 2 July 2021, online only because of covid-19
- Member of the SOC of the “The origin and build-up of angular momentum in stellar systems”, Strasbourg, France, Spring 2021 (postponed because of covid-19)
- Member of the SOC of the “Multiple Stellar Populations in the next decade”, Padua, Italy, 7-11 September 2020 (to be rescheduled due to covid-19 emergency)
- Member of the SOC of the “Globular Clusters at the Nexus of Star and Galaxy Formation”, KITP, Santa Barbara, CA, US, March – June 2020 (rescheduled due to covid-19 emergency)

- Member of the SOC of the “MODEST 20: Dense Star Clusters in the Era of Large Surveys”, TIFR, Mumbai, India, February 2–7 2020
- Member of the SOC of the “LXIII Conference of the Italian Astronomical Society (SAIt)”, Roma, Italy, May 14 – 17 2019
- Member of the SOC of the “PHAROS Conference 2019: the multi-messenger physics and astrophysics of neutron stars”, Platja d’ Aro, Spain, April 23 – 26 2019
- Member of the SOC of the IAU Symposium 351: Star Clusters from the Milky Way to the Early Universe, Bologna, Italy, May 27 – 31 2019
- Member of the SOC of the “MODEST 18: Dense Stellar Systems in the Era of Gaia, LIGO, and LISA”, Santorini, Greece, June 25 – 29 2018
- Member of the SOC of the Workshop “Ultraluminous X-ray pulsars”, European Space Astronomy Centre (ESAC), Madrid, Spain, from June 6 – 8 2018
- Member of the SAC of the Symposium “Gravitational-waves Science & Technology” (GRASS), Padua, Italy, March 1 – 2 2018
- Member of the SOC of the conference “Multi-spin and interacting galaxies”, SAO RAS, at the Special Astrophysical Observatory of RAS located in Nizhnij Arkhyz, Russia, September 26 – 30 2016

COORDINATION of RESEARCH GROUPS, MEMBERSHIPS and COLLABORATIONS:

Division Chair for the Observation Science Board of the Einstein Telescope *2021–now*

- Einstein Telescope (ET) is the European next-generation ground-based gravitational-wave detector.
- The Observation Science Board aims to identify the main scientific cases for the ET, to write the first Blue Book of ET and to organize a broad scientific community for the exploitation of ET.
- I chair Division 3 (Population studies) of the ET Observation Science Board, together with G. Cusin and A. Riotto. For this task, the three Division chairs (including myself) organize and coordinate the work of the > 100 members of the Division.

Member of the 4MOST Consortium

2020–now

- Team member of the survey S13 - Stellar Clusters in 4MOST (co-PIs: Sara Lucatello, Angela Bragaglia, Antonella Vallenari; 63 members).
- Survey S13 aims to study $\sim 120k$ stars in low-resolution spectroscopy and $\sim 90k$ stars in high-resolution spectroscopy in globular clusters, open clusters and star forming regions in the Milky Way and Magellanic Clouds.

Head of the TEONGRAV Padua Group

2019 – now

- Equivalent to group leader at the Italian National Institute for Nuclear Physics (INFN).
- The TEONGRAV Padua group (composed of 18 astrophysics researchers) is one of the core members of [TEONGRAV](#), a national INFN project bringing together teams with theoretical experience in the field of gravitational waves.

PI and leader of the DEMOBLACK ERC Team

2018 – now

- The [DEMOBLACK](#) Team currently consists of 7 postdoctoral fellows (6 of them funded by the ERC grant), three PhD student (one of them funded by the ERC grant) and several collaborators (working at the University of Padua, SISSA, University of Innsbruck, University of Leiden, University of Jena, INFN, INAF, GSSI, ..).

Work Package Leader, Pharos COST action

2018 – 2022

- The COST Action PHAROS (CA16214) has the goal of attacking key challenges in the physics involved in neutron stars by facing them via an innovative, problem based approach, focusing on current, and new, data and experiments, and that hinges on interdisciplinary Working Groups. More details at this [link](#).

Member of the GWIC-3G Science Team *2018 – now*

- In 2018, the Gravitational Wave International Committee (GWIC) established a 3G Science Team to explore the scientific impact of third-generation gravitational wave detectors.
- As a writing team member of the Compact Binary group, I have significantly contributed to the [Science Book](#) of 3G detectors ([link](#)).
- I am one of the lead co-authors of the Astro2020 GWIC-3G science white paper “Deeper, wider, sharper: next-generation ground-based gravitational-wave observations of binary black holes” ([link](#)).

Co-chair of LISA Work Package on ”Stellar-mass binaries” *2019 – now*

- I am an associate member of the [LISA Consortium](#) since 2018.
- Since 2019, I co-chair the LISA Work Package on Stellar-mass binaries together with K. Breivik and S. Toonen.

Member of the LIGO – Virgo collaboration *2018 – now*

- I am an active member of the Virgo collaboration, mostly working in the Populations & Rates Team.

Member of the ENGRAVE collaboration *2018 – now*

- The [ENGRAVE](#) (Electromagnetic counterparts of gravitational wave sources at the Very Large Telescope) collaboration is an international collaboration bringing together astronomers who use ESO facilities to research gravitational wave events.

Member of the GRAWITA collaboration *2018 – now*

- The [GRAWITA](#) (GRAvitational Wave Inaf TeAm) collaboration aims to carry out follow-up observational campaigns in the radio, optical, NIR, X-ray, and gamma-ray bands of gravitational wave (GW) detector triggers.

Associated member of INAF *2018 - now*

Member of the MAORY Science Team *2015 – 2017*

- The MAORY Science Team was established for the scientific exploitation of MAORY, the multi-conjugate adaptive optics module of the European Extremely Large Telescope.
- I am one of the lead co-authors of the [MAORY Science Cases White Book](#) ([link](#)).

Member of the European Astronomical Society (EAS) *2014 – now*

Member of the Italian National Institute of Nuclear Physics (INFN) *2014 – now*

Member of the VMC survey *2013 – 2017*

- The [VMC](#) is the VISTA near-infrared YJKs survey of the Magellanic Clouds. PI: M. R. Cioni.

Member of the Gaia-ESO Survey (GES) *2012 – now*

- [GES](#) is a public spectroscopic survey, targeting $\geq 10^5$ stars, systematically covering all major components of the Milky Way, from halo to star forming regions.

Member of the International Astronomical Union (IAU) *2012 – now*

COMMISSION OF TRUST, REFEREE and EDITORIAL BOARD

MEMBERSHIPs:

- Panel member, **Hubble Fellowship 2021**. The [Hubbble Fellowship](#) is one of the most prestigious post-doctoral fellowships in Astrophysics.
- Member of the selection committee for the **Amaldi Prize 2020**. We assigned a prize for the two best Master Theses about Multi-messenger and Gravitational-Wave Astronomy.
- Invited member of the Editorial Board of the journal [Computational Astrophysics and Cosmology](#) (2017–now).
- Invited Review Editor for [Frontiers in Astronomy and Space Sciences](#) (2015 – 2018).
- Reviewer and panel member, Cycle 16 Chandra Proposal Peer Review (2014).
- Referee for the European Research Council on a regular basis (2013–now).
- Referee for the Italian Ministry of Education, University and Research (2013–now).
- Referee for the National Science Foundation organizations of various EU and non-EU countries, including UK, Poland, The Netherlands (2012–now).
- Referee for the Italian HPC centre [CINECA](#) (2011–now).
- Referee for some of the main astrophysics journals (Astrophysical Journal, Astrophysical Journal Letters, Monthly Notices of the Royal Astronomical Society, Astronomy & Astrophysics, Astronomische Nachrichten, Nature Astronomy), physics journal (Physical Review D, Physical Review Letters) and multidisciplinary science journals (Nature, Science) on a regular basis (2006–now).

INSTITUTIONAL ACTIVITIES and other SERVICE WORK:

- Coordinator of the Virgo project for the CINECA – INFN agreement: I coordinate the allocation of CINECA’s CPU – GPU resources to INFN–Virgo members (2020 – now). From January 2023 I will become member of the National INFN HPC Committee for the TEONGRAV group.
- Member of the Board of Professors of the Master degree in Astrophysics and Cosmology, Padua University (2021 – now).
- Member of the Board of Professors of the Master degree in Physics of Data, University of Padua (2019 – now).
- Member of the Board of Professors, PhD Course in Astronomy, University of Padua (2019 – now).
- Member of the Board of Professors, Physics and Astronomy Department, University of Padua (2018 – now).
- Chair of the Extra-Galactic Group of the Astrophysics and Particle Physics Institute of the University of Innsbruck. The chair organizes the teaching activities of the other members of the group, administrates the group budget, assesses the annual performance of the other members of the group (two associate professors and several postdoctoral fellows, PhD students and administrative assistants), coordinates the activities and envisages the vision of the Institute in collaboration with the chairs of the other two groups (2017 – 2018).
- Member of the Board of full professors of the “Schwerpunkt Physik” (equivalent to a Physics Department) of the University of Innsbruck (2017 – 2018).

- Member of the selection committee for the admission of PhD students in Physics and/or Astronomy in several universities (2014 – now).
- Member of > 30 committees (2012 – now), for the appointment of fellowships, postdoctoral positions, and tenure-track positions in several national and international universities.
- Member of > 20 committees of Bachelor and Master degree at the University of Padua (2018 – now).
- External reviewer and examiner for the PhD Thesis of Reinhold Willcox (Monash University, Australia, 2022), Debatri Chattopadhyay (Swinburne University, Australia, 2021), Lumen Boco (SISSA, Italy, 2021), Ruggero de Vita (Melbourne University, Australia, 2019), Shubhanshu Tiwari (GSSI and University of Trento, Italy, 2018) and Tilman Hartwig (Université Pierre and Marie Curie, Paris, 2017).

OUTREACH, LECTURES AT HIGH/PRIMARY SCHOOLS and PRESS RELEASES:

- Public Talk at the event "Frontiers of gravitational wave research: the Italian expertise for the Einstein telescope", November 9th 2023, Italian Embassy, Tiergartenstr. 22, Berlin, Germany
- Public Talk at the "Heidelberg Laureate Forum", September 27th 2023, Heidelberg University, Heidelberg, Germany
- Public Talk at the Orange County Astronomers club in Southern California (August 11th 2023), available on [youtube](#)
- Interview with Anthony King for Horizon, the EU Research & Innovation Magazine (13/02/2023), The mysterious black behemoths controlling our galaxies ([link](#))
- Interview with Sylvain Guilbaud for the French magazine Ciel & Espace "Des objets célestes inédits entrent en scène", 28/06/2022
- Interview with Camille M. Carlisle for Sky and Telescope (24/02/2022), Black hole spins crookedly ([link](#))
- Press conference at the American Physical Society (April 9th 2022) for the simulation of the collision between two massive stars ([link 1](#),[link 2](#))
- Short interview by Nature Italy (7 July 2021) for the detection of the first black hole – neutron star merger event ([English link](#), [Italian link](#)).
- Short interview by Italian newspaper "la Repubblica" (29 June 2021) for the detection of the first black hole – neutron star merger event ([link](#)).
- Article "Mind the gap" ([link](#)) for the ASIMMETRIE magazine (INFN), May 2021, and interview by Matteo Massicci during the facebook live stream (19 May 2021).
- Galileo Festival, Dalla scoperta dei raggi cosmici alla nascita dell'astrofisica multimessaggera (From the discovery of cosmic rays to the birth of multi-messenger astrophysics), Padua, October 13 2020 (postponed because of covid-19).
- Short interview by the French newspaper "Le Monde" (2 September 2020) for the detection of GW190521 by the LIGO-Virgo collaboration ([link](#))
- Short interview by la Repubblica (2 September 2020) for the detection of GW190521 by the LIGO-Virgo collaboration ([link](#)) for the detection of GW190521 by the LIGO-Virgo collaboration

- Public lecture for the Gratton Prize 2019 ceremony, September 28 2019, Frascati, Italy Lecture title: “L’alba dell’astrofisica multi-messaggio” (“The dawn of multi-messenger astronomy”)
- Article for the LIGO magazine ISSUE 14, March 2019 (<https://ligo.org/magazine/>)
- Public Lecture on “Come nascono le binarie di buchi neri? Dalle stelle massicce alle sorgenti di onde gravitazionali” (“How do binary black holes form? From massive stars to gravitational-wave sources”), organized by Fondazione Niels Stensen, Florence, Italy, December 1 2018
- Open Innovation Days, <http://nova.ilsole24ore.com/oid/>, Round Table on “Professione scienziato: come si costruisce una carriera di alto livello nella ricerca” (“How to build a successful academic career in Science”), October 27 2018, Padua, Italy
- Public Lecture on “Come nasce una coppia di buchi neri?” (“How do binary black holes form?”), I Giovedì dell’Astronomia, Padua, September 20 2018
- Lectures on “Come nascono i buchi neri” (“The birth of binary black holes”), Campus Scientifico “Il Futuro Presente 2018 – Onde. Come l’Universo e la materia ci parlano”, Fondazione Banca Alta Toscana, Quarrata, Italy, September 7 2018
- Several Press releases for the ERC Consolidator Grant ([link1](#), [link2](#))
- Lecture on “La danza dei buchi neri, ovvero come fanno i buchi neri a formare binarie e ad emettere onde gravitazionali” (The dance of black holes: how black holes form binary systems and emit gravitational waves), licei classico Tiziano e scientifico Galilei di Belluno (Belluno’s high schools), “Progetto Fisica delle particelle elementari e moderna” (Project about Modern Physics and Particle Physics), March 17 2017
- “Il nostro Universo. Incontro per famiglie e bambini delle scuole primarie” (Our Universe. Meeting for families and primary-school kids), April 30 2016, Sala degli Anziani, Comune di Padova, Padova, Italy, meeting organized by Dr Livia Conti (INFN)
- Article for “Il Bo” (magazine of the University of Padua, in Italian) on the detection of massive stellar black holes by Advanced LIGO: “Non solo onde gravitazionali: i buchi neri massicci” ([link](#))
- Article for MEDIA INAF on the detection of massive stellar black holes by Advanced LIGO, 22/02/2016, “Buchi neri oversize” ([link](#))
- Interviewed as one of the 200 “Women of the year 2015” (among which 10 scientists) by the Italian newspaper “F” (Cairo Editore, January 13 2016)
- Interviewed by IntervieWASS 2015, on behalf of the Sociedad Espanola Astronomia ([link1](#), [link2](#))
- EAS PRESS RELEASE for the MERAC PRIZES 2015 ([link](#))
- INAF PRESS RELEASE for the MERAC PRIZES 2015 ([link](#))
- Notte dei Ricercatori (The night of researchers), public conferences at the Osservatorio Astronomico di Padova, Padova, Italy, <http://www.venetonight.it/>, from 2011 to now
- [Messaggi di Urania](#), Milano, Italy, public conferences at the Planetarium of Milano (2009)
- Interview by the Earth & Sky broadcast network, based in Austin, Texas, US, ([link](#)) (2008)

ACCEPTED OBSERVATIONAL PROPOSALS (last five years only):

- Co-I, ESO PROPOSAL, Public Survey Panel, Stellar Clusters in 4MOST (S13 4MOST community survey), PIs: Sara Lucatello, Angela Bragaglia, Antonella Vallenari, 209K fiber hours at 4MOST/VISTA telescope.

- Co-I, HST PROPOSAL, Cycle 28, “Compact binary mergers: R-process kilonovae and ultra-relativistic jets”, PI: Nial Tanvir, 18 Primary Spacecraft Orbits + 30 ksec XMM Time
- Co-I, CHANDRA PROPOSAL (LARGE PROGRAM), Cycle 21, “Star formation in starburst: a deep ACIS-I observation of Westerlund 1”, PI: Mario Guarcello, 1Ms observing time + \$ 126’640
- Co-I, ESO PROPOSAL (LARGE PROGRAM, PERIODs 102 – 104, ToO) “ENGRAVE: Electromagnetic counterparts of gravitational wave sources at the Very Large Telescope (Part I)”, FORS2 and XSHOOTER, total: 136 hours service mode (SM)
- Co-I, ESO PROPOSAL (PERIOD 102,ToO) “ENGRAVE: Electromagnetic counterparts of gravitational wave sources at the Very Large Telescope (Part II)”, HAWKI (24h), NACO (10h) and XSHOOTER (0.5h), total: 34.5 hours SM
- Co-I, ESO PROPOSAL (PERIOD 102,ToO) “ENGRAVE: Electromagnetic counterparts of gravitational wave sources at the Very Large Telescope (Part III)”, MUSE (9h SM)

ACCEPTED COMPUTATIONAL PROPOSALS:

Summary: > 28 M CPU and GPU hours awarded by CINECA (Italy) and other European supercomputing centres (CSCS/Switzerland, DECI).

- CO-I of the proposal “StarCluBin” (PI: my PhD student Stefano Torniamenti) accepted by the DECI-17 call and awarded 7.52 M CPU standardised CPU hours (2021).
- CO-I of the proposal “The impact of stellar dynamics on gravitational wave sources” (PI: M. Spera) at CINECA (Italy), through an agreement with INAF, 5.8M CPU hours awarded for N-body simulations on the MARCONI Tier-0 cluster (2017).
- PI-I of the proposal “Formation of star clusters: how common is infant rotation?” at CINECA, through an agreement with INAF, 5.9M CPU hours awarded for N-body simulations on the MARCONI Tier-0 cluster (2017).
- CO-I of the proposal “The inner parsecs of our Galaxy: star formation and its environment.” (PI: A. Ballone) at CINECA, through an agreement with INAF, 5.7M CPU hours awarded for N-body simulations on the MARCONI Tier-0 cluster (2017).
- PI of the proposal “The importance of subsonic filaments in star formation” at CINECA, 198k CPU hours awarded for N-body simulations on the GALILEO IBM cluster (2016).
- 2 CO-I of the proposal “Evolution of Massive Black Hole Binaries” at CINECA, PI: Elisa Bortolas, 198k CPU hours awarded for N-body simulations on the GALILEO IBM cluster (2016).
- PI of the proposal “Rejuvenating S0 galaxies through minor mergers” at CINECA, 198k CPU hours awarded for N-body simulations with GPUs on the GALILEO IBM cluster (2015).
- PI of the proposal “Young star cluster disruption by tidal fields” at CINECA, 50k CPU hours awarded for N-body simulations with GPUs on the Eurora cluster (2014).
- CO-I of the proposal “Blue straggler stars in young star clusters” (PI: Mr A. Moretti, Master student) at CINECA, 50k CPU hours awarded for N-body simulations with GPUs on the Eurora cluster (2014).
- PI of the proposal “Star formation in proximity of a supermassive black hole” at CINECA, 2.28M CPU hours awarded for N-body/SPH simulations on the IBM Blue Gene/Q Fermi (2013).
- PI of the proposal “Making very massive stars through stellar collisions” at CINECA, 50k CPU

hours awarded for N-body simulations with GPUs on the Eurora cluster (2013).

- CO-I of the proposal "Testing and parallelizing the new hybrid Monte Carlo code MYSCE" (PI: G. Galanti, Master student) at CINECA, 250.0k CPU hours awarded for N-body/SPH simulations on the IBM Blue Gene/Q Fermi and on the EURORA cluster (2013).
- CO-I of the proposal "Investigating the statistics and parameter space of double compact object binaries in young star clusters" (PI: B. Ziosi) at CINECA, 50.0k CPU hours awarded for N-body/SPH simulations on the IBM PLX and on the EURORA cluster (2013).
- PI of the proposal "The violent life of the Galactic Centre", at CINECA, 281.6k CPU hours awarded for N-body/SPH simulations on the IBM PLX and on the IBM Blue Gene/Q Fermi cluster (2012).
- CO-I of the proposal "Computational Frontiers of Black Hole Dynamics" (PI: E. Ripamonti), at CINECA, 50k CPU hours awarded for simulations with GPUs on the IBM PLX cluster (2012).
- PI of the proposal "The fate of ring galaxies", at CINECA, 216k CPU hours awarded for N-body/SPH simulations on the IBM SP6 and on the Fermi cluster (2011).
- CO-I of the proposal "Massive black holes in young star clusters" (PI: E. Ripamonti), at CINECA, 48.8k CPU hours awarded for simulations with GPUs on the IBM PLX cluster (2011).
- PI of the proposal "The fate of ring galaxies: preliminary tests", at CINECA, 18k CPU hours awarded for N-body/SPH sim. on the IBM SP6 and BGP clusters (2011).
- CO-I of the proposal "Stellar dynamics with GPUs" (PI: Ripamonti), at CINECA, 16k CPU hours awarded for simulations with GPUs on the IBM PLX cluster (2011).
- PI of the proposal "Formation of massive stars in the Galactic Centre", at the Swiss National Supercomputing Centre (CSCS) in Lugano (Switzerland), 150k CPU hours awarded for N-body/SPH simulations on the CRAY XT3 cluster at the CSCS (2008).

IT KNOWLEDGE and CODE DEVELOPMENT:

Operating systems.....

Linux/Unix (excellent knowledge), Windows, Mac OS.

Programming languages.....

- Python (excellent), C and C++ (very good), Fortran 77 and 90 (good), sh/bash (good), perl, HTML.
- Experience in parallel computing (usage of MPI and OpenMP) and in high-performance computing.
- Experience in GPU computing (with CUDA parallel architecture).

Codes, developer:.....

- **FASTCLUSTER** (MM+ 2021): written in Python, FASTCLUSTER is one of the rare population-synthesis codes aimed to integrate binary black hole dynamics in star clusters. FASTCLUSTER allows us to study the dynamical formation of binary black holes without running computationally expensive direct N-body simulations: it is a key tool to probe the relevant parameter space of binary compact object formation. Open source code downloadable from this [link](#).
- **SEVN** ("Stellar EVolution for N-body", population synthesis code for N-body simulations, Spera, MM & Bressan 2015; Spera & MM 2017; Spera, MM+ 2019): written in C++, SEVN allows to integrate stellar evolution and binary evolution processes (tides, Roche lobe overflow, wind accretion, gravitational wave decay, etc) through interpolation algorithms. SEVN is used mostly

to investigate the formation of binary compact objects in the field and in star clusters. Open source code downloadable from this [link](#).

- **MOBSE** (“Massive Objects in Binary Stellar Evolution”, population synthesis code, upgrade of BSE; [MM+ 2017](#); [Giacobbo, MM & Spera 2018](#)): written in Fortran 77, MOBSE is an upgrade of the population synthesis code BSE ([Hurley et al. 2000, 2002](#)). The upgrade included a new model for stellar winds, new prescriptions for core collapse, electron capture and pair instability supernovae, a new treatment of stellar radii and of natal kicks. Open source code downloadable from this [link](#).
- **BEV** (“Binary EVolution”, hybrid N-body Monte-Carlo code for binary evolution in a globular cluster, [MM+ 2004, 2006](#)): written in Fortran (77+90), BEV allows to investigate the evolution of exotic binaries (e.g. blue straggler stars, compact-object binaries) in a multi-mass King model. Available upon request.
- **MAKECLOUD** (generator of turbulence-supported molecular clouds, [MM 2017](#)), written in Python. Available upon request.

LANGUAGE KNOWLEDGE:

Italian (mother tongue), English (fluent), French (good), German (basic)

PUBLICATION SUMMARY:

ORCID ID: orcid.org/0000-0001-8799-2548

Publications (total, 1st author): 312, 72	Citations ^b (total, 1st author): 25845, 2700
Refereed publications ^a (total, 1st author): 225, 46	Normalized citations ^b (total, 1st author): 2183, 1006
Short author list publications ^c : 237	Citations to short author list publications ^{b,c} : 8993
Publications as an advisor: >100	Publications with > 100 citations ^b : 44
Publications without PhD supervisor: >290	Short author list publications ^c with > 100 citations ^b : 21
Invited review book chapters: 4	H-index ^b (total, 1st author): 68, 29

^a My refereed publications are published in Nature (2 papers), Astrophysical Journal (> 10), Monthly Notices of the Royal Astronomical Society (> 60), Astronomy & Astrophysics (> 10), New Astronomy (1), Physical Review D/X/Letters (> 5) and Astronomische Nachrichten (4).

^b Data for citations, normalized citations and H-index come from ADS: <http://adsabs.harvard.edu>, as of November 19, 2023. "Normalized citations" are normalized to the number of co-authors.

The number of citations from google scholar (<https://scholar.google.com/citations?user=dAV1CSMAAAJ&hl=en&authuser=1&oi=ao>) is 27059 (H-index = 73).

^c For "short author list publications" I mean: my publications excluding large collaboration papers. Full list of publications available at <https://web.oapd.inaf.it/mapelli/>.

Peer-reviewed Publications.....

Symbol # marks publications in collaboration with students and postdocs I supervised or co-supervised.

- # - Codazzo, Elena; Di Giovanni, Matteo; Harms, Jan; Dall'Amico, Marco; Mapelli, Michela, *Study on the detectability of gravitational radiation from single-binary encounters between black holes in nuclear star cluster: the case of hyperbolic flybys*, Physical Review D, in press, <https://ui.adsabs.harvard.edu/abs/2022arXiv220701326C/abstract>
- # - Costa, Guglielmo ; Ballone, Alessandro ; Mapelli, Michela ; Bressan, Alessandro, *Formation of black holes in the pair-instability mass gap: evolution of a post-collision star*, 2022, MNRAS, 516, 1072, <https://ui.adsabs.harvard.edu/abs/2022MNRAS.516.1072C/abstract>
- # - Torniamenti, Stefano ; Rastello, Sara ; Mapelli, Michela ; Di Carlo, Ugo N. ; Ballone, Alessandro ; Pasquato, Mario, *Dynamics of binary black holes in young star clusters: the impact of cluster mass and long-term evolution*, 2022, MNRAS, 517, 2953, <https://ui.adsabs.harvard.edu/abs/2022MNRAS.517.2953T/abstract>
- # - Santoliquido, Filippo; Mapelli, Michela; Artale, M. Celeste; Boco, Lumen, *Modelling the host galaxies of binary compact object mergers with observational scaling relations*, 2022, MNRAS, 516, 3297, <https://ui.adsabs.harvard.edu/abs/2022MNRAS.516.3297S/abstract>
- Randich, S., et al. (including Michela Mapelli), *The Gaia-ESO Public Spectroscopic Survey: Implementation, data products, open cluster survey, science, and legacy*, 2022, A&A, 666, 121, <https://ui.adsabs.harvard.edu/abs/2022A%26A...666A.121R/abstract>
- Gilmore G., et al. (including Michela Mapelli), *The Gaia-ESO Public Spectroscopic Survey: Motivation, implementation, GIRAFFE data processing, analysis, and final data products*, 2022, A&A, 666, 120, <https://ui.adsabs.harvard.edu/abs/2022A%26A...666A.120G/abstract>
- # - Ronchini, Samuele; Branchesi, Marica; Oganessian, Gor; Banerjee, Biswajit; Dupletsa, Ulyana; Ghirlanda, Giancarlo; Harms, Jan; Mapelli, Michela; Santoliquido, Filippo, *Perspectives for multi-messenger astronomy with the next generation of gravitational-wave detectors and high-energy satellites*, 2022, A&A, 665, 97, <https://ui.adsabs.harvard.edu/abs/2022A%26A...665A..97R/abstract>
- # - Patricelli, Barbara; Bernardini, Maria Grazia; Mapelli, Michela; D'Avanzo, Paolo; Santoliquido, Filippo; Cella, Giancarlo; Razzano, Massimiliano; Cuoco, Elena, *Prospects for multimessenger detection of binary neutron star mergers in the fourth LIGO-Virgo-KAGRA observing run*, 2022, MNRAS, 513, 4159, <https://ui.adsabs.harvard.edu/abs/2022MNRAS.513.4159P/abstract>
- # - Périgois, Carole; Santoliquido, Filippo; Bouffanais, Yann; Di Carlo, Ugo N.; Giacobbo, Nicola; Rastello, Sara; Mapelli, Michela; Regimbau, Tania, *Gravitational background from dynamical binaries and detectability with 2G detectors*, 2022, Physical Review D, Volume 105, Issue 10, article id.103032, <https://ui.adsabs.harvard.edu/abs/2022PhRvD.105j3032P/abstract>
- # - Perna, Rosalba; Artale, M. Celeste; Wang, Yi-Han; Mapelli, Michela; Lazzati, Davide; Sgalletta, Cecilia; Santoliquido, Filippo, *Host galaxies and electromagnetic counterparts to binary neutron star mergers across the cosmic time: detectability of GW170817-like events*, 2022, MNRAS, 512, 2654, <https://ui.adsabs.harvard.edu/abs/2022MNRAS.512.2654P/abstract>
- # - Mapelli, Michela; Bouffanais, Yann; Santoliquido, Filippo; Arca Sedda, Manuel; Artale, M. Celeste, *The cosmic evolution of binary black holes in young, globular, and nuclear star clusters: rates, masses, spins, and mixing fractions*, 2022, MNRAS, 511, 5797, <https://ui.adsabs.harvard.edu/abs/2022MNRAS.511.5797M/abstract>
- # - Trani, Alessandro A.; Rastello, Sara; Di Carlo, Ugo N.; Santoliquido, Filippo; Tanikawa, Ataru; Mapelli, Michela, *Compact object mergers in hierarchical triples from low-mass young star clusters*, 2022, MNRAS, 511, 1362, <https://ui.adsabs.harvard.edu/abs/2022MNRAS.511.1362T/abstract>
- # - Torniamenti, Stefano; Pasquato, Mario; Di Cintio, Pierfrancesco; Ballone, Alessandro; Iorio, Giuliano; Artale, M. Celeste; Mapelli, Michela, *Hierarchical generative models for star clusters from hydrodynamical simulations*, 2022, MNRAS, 510, 2097, <https://ui.adsabs.harvard.edu/abs/2022MNRAS.510.2097T/abstract>
- # - Libanore, S.; Artale, M. C.; Karagiannis, D.; Liguori, M.; Bartolo, N.; Bouffanais, Y.; Mapelli, M.; Matarrese, S., *Clustering of Gravitational Wave and Supernovae events: a multitracers analysis in Luminosity Distance Space*, 2022, JCAP, 02, 003, <https://ui.adsabs.harvard.edu/abs/2022JCAP...02...003L/abstract>
- # - Sicilia, Alex; Lapi, Andrea; Boco, Lumen; Spera, Mario; Di Carlo, Ugo N.; Mapelli, Michela; Shankar, Francesco; Alexander, David M.; Bressan, Alessandro; Danese, Luigi, *The Black Hole Mass Function Across Cosmic Times. I.*

Stellar Black Holes and Light Seed Distribution, 2022, ApJ, 924, 56, <https://ui.adsabs.harvard.edu/abs/2022ApJ...924...56S/abstract>

- # - Dall'Amico, Marco, Mapelli, Michela, Di Carlo, Ugo N., Bouffanais, Yann, Rastello, Sara, Santoliquido, Filippo, Ballone, Alessandro, Arca Sedda, Manuel, *GW190521 formation via three-body encounters in young massive star clusters*, 2021, MNRAS, 508, 3045, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.508.3045D/abstract>
- # - Di Carlo, Ugo N., Mapelli, Michela, Pasquato, Mario, Rastello, Sara, Ballone, Alessandro, Dall'Amico, Marco, Giacobbo, Nicola, Iorio, Giuliano, Spera, Mario, Torniamenti, Stefano, Haardt, Francesco, *Intermediate mass black holes from stellar mergers in young star clusters*, 2021, MNRAS, 507, 5132, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.507.5132D/abstract>
- # - Bouffanais, Yann, Mapelli, Michela, Santoliquido, Filippo, Giacobbo, Nicola, Di Carlo, Ugo N., Rastello, Sara, Artale, M. Celeste, Iorio, Giuliano, *New insights on binary black hole formation channels after GWTC-2: young star clusters versus isolated binaries*, 2021, MNRAS, 507, 5224, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.507.5224B/abstract>
- # - Rastello, Sara, Mapelli, Michela, di Carlo, Ugo N., Iorio, Giuliano, Ballone, Alessandro, Giacobbo, Nicola, Santoliquido, Filippo, Torniamenti, Stefano, *Dynamics of binary black holes in low-mass young star clusters*, 2021, MNRAS, 507, 3612, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.507.3612R/abstract>
- # - Torniamenti, Stefano, Ballone Alessandro, Mapelli Michela, Gaspari Nicola, Di Carlo Ugo N., Rastello S., Giacobbo N., Pasquato M., *The impact of binaries on the evolution of star clusters from turbulent molecular clouds*, 2021, MNRAS, 507, 2253, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.507.2253T/abstract>
- # - Mapelli, Michela, Santoliquido, Filippo, Bouffanais, Yann, Arca Sedda, Manuel, Artale, Maria Celeste, Ballone, Alessandro, *Mass and Rate of Hierarchical Black Hole Mergers in Young, Globular and Nuclear Star Clusters*, 2021, Symmetry, 13, 1678, <https://ui.adsabs.harvard.edu/abs/2021Symm...13.1678M/abstract>
- # - Bouffanais Yann, Mapelli Michela, Santoliquido Filippo, Giacobbo Nicola, Iorio Giuliano, Costa Guglielmo, *Constraining accretion efficiency in massive binary stars with LIGO-Virgo black holes*, 2021, MNRAS, 505, 3873, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.505.3873B/abstract>
- # - Mapelli Michela, Dall'Amico Marco, Bouffanais Yann, Giacobbo Nicola, Arca Sedda Manuel, Artale M. Celeste, Ballone Alessandro, Di Carlo Ugo N., Iorio Giuliano, Santoliquido Filippo, Torniamenti Stefano, *Hierarchical black hole mergers in young, globular and nuclear star clusters: the effect of metallicity, spin and cluster properties*, 2021, MNRAS, 505, 339, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.505..339M/abstract>
- # - Santoliquido Filippo, Mapelli Michela, Giacobbo Nicola, Bouffanais Yann, Artale M. Celeste, *The cosmic merger rate density of compact objects: impact of star formation, metallicity, initial mass function, and binary evolution*, 2021, MNRAS, 502, 4877, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.502.4877S/abstract>
- # - Costa Guglielmo, Bressan Alessandro, Mapelli Michela, Marigo Paola, Iorio Giuliano, Spera Mario, *Formation of GW190521 from stellar evolution: the impact of the hydrogen-rich envelope, dredge-up, and $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$ rate on the pair-instability black hole mass gap*, 2021, MNRAS, 501, 4514, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.501.4514C/abstract>
- # - Ballone Alessandro, Torniamenti Stefano, Mapelli Michela, Di Carlo Ugo N., Spera Mario, Rastello Sara, Gaspari Nicola, Iorio Giuliano, *From hydrodynamics to N-body simulations of star clusters: mergers and rotation*, 2021, MNRAS, 501, 2920, <https://ui.adsabs.harvard.edu/abs/2021MNRAS.501.2920B/abstract>
- # - Libanore Sara, Artale M. Celeste, Karagiannis D., Liguori Michele, Bartolo Nicola, Bouffanais Yann, Giacobbo Nicola, Mapelli Michela, Matarrese Sabino, *Gravitational Wave mergers as tracers of Large Scale Structures*, 2021, Journal of Cosmology and Astroparticle Physics (JCAP), Issue 02, article id. 035, <https://ui.adsabs.harvard.edu/abs/2021JCAP...02..035L/abstract>
- # - Trevisan Piero, Pasquato Mario, Ballone Alessandro, Mapelli Michela, *Measuring the spectral index of turbulent gas with deep learning from projected density maps*, 2020, MNRAS, 498, 5798, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.498.5798T/abstract>
 - Ackley K. et al. (including Mapelli Michela), *Observational constraints on the optical and near-infrared emission from the neutron star-black hole binary merger candidate S190814bv*, 2020, Astronomy & Astrophysics, 643, 113, <https://ui.adsabs.harvard.edu/abs/2020A%26A...643A.113A/abstract>
- # - Di Carlo Ugo N., Mapelli Michela, Giacobbo Nicola, Spera Mario, Bouffanais Yann, Rastello Sara, Santoliquido Filippo, Pasquato Mario, Ballone Alessandro, Trani Alessandro A., Torniamenti Stefano, Haardt Francesco, *Binary black holes in young star clusters: the impact of metallicity*, 2020, MNRAS, 498, 495, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.498..495D/abstract>

- # – Rastello Sara, Mapelli Michela, Di Carlo Ugo N., Giacobbo Nicola, Santoliquido Filippo, Spera Mario, Ballone Alessandro, Iorio Giuliano, *Dynamics of black hole-neutron star binaries in young star clusters*, 2020, MNRAS, 497, 1563, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.497.1563R/abstract>
- # – Di Carlo, Ugo N., Mapelli, Michela, Bouffanais, Yann, Giacobbo, Nicola, Bressan, Alessandro, Spera, Mario, Haardt, Francesco, *Binary black holes in the pair-instability mass gap*, 2020, MNRAS, 497, 1043, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.497.1043D/abstract>
- # – Santoliquido Filippo, Mapelli Michela, Bouffanais Yann, Giacobbo Nicola, Di Carlo Ugo N., Rastello Sara, Artale M. Celeste, Ballone Alessandro, *The Cosmic Merger Rate Density Evolution of Compact Binaries Formed in Young Star Clusters and in Isolated Binaries*, 2020, ApJ, 898, 152, <https://ui.adsabs.harvard.edu/abs/2020ApJ...898.152S/abstract>
- # – Ballone Alessandro, Mapelli Michela, Di Carlo Ugo N., Tornamenti Stefano, *Evolution of fractality and rotation in embedded star clusters*, 2020, MNRAS, 496, 49, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.496...49B/abstract>
 - Graziani L., Schneider R., Marassi S., Del Pozzo W., Mapelli M., Giacobbo N., *Cosmic archaeology with massive stellar black hole binaries*, 2020, MNRAS Letters, 495, 81, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.495L.81G/abstract>
- # – Artale M. Celeste, Bouffanais Yann, Mapelli Michela, Giacobbo Nicola, Sabha Nadeen B., Santoliquido Filippo, Pasquato Mario, Spera Mario, *An astrophysically motivated ranking criterion for low-latency electromagnetic follow-up of gravitational wave events*, 2020, MNRAS, 495, 1841, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.495.1841A/abstract>
 - Rodríguez Castillo, G. A. et al. (including Mapelli Michela), *Discovery of a 2.8 s pulsar in a 2 d orbit High-Mass X-ray Binary powering the Ultraluminous X-ray source ULX-7 in M51*, 2020, ApJ, 895, 60, <https://ui.adsabs.harvard.edu/abs/2020ApJ...895...60R/abstract>
- # – Fiorentino G., Bellazzini M., Spera M., Sabha N. B., Mapelli M., Schreiber L., Dall’Ora M., Inno L., Patti M., Braga V. F., Lombini M., Diolaiti E., Cortecchia F., Arcidiacono C., Plantet C., Agapito G, *Deep into the core of dense star clusters: an astrometric and photometric test case for ELT*, 2020, MNRAS, 494, 4413, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.494.4413F/abstract>
- # – Arca Sedda Manuel, Mapelli Michela, Spera Mario, Benacquista Matthew, Giacobbo Nicola, *Fingerprints of binary black hole formation channels encoded in the mass and spin of merger remnants*, 2020, ApJ, 894, 133, <https://ui.adsabs.harvard.edu/abs/2020ApJ...894..133A/abstract>
- # – Giacobbo N., Mapelli M., *Revising natal kick prescriptions in population synthesis simulations*, 2020, ApJ, 891, 141, <https://ui.adsabs.harvard.edu/abs/2020ApJ...891..141G/>
 - Grado, A., Cappellaro, E., Covino, S., Getman, F., Greco, G., Limatola, L., Yang, S., Amati, L., Benetti, S., Branchesi, M., Brocato, E., Botticella, M., Campana, S., Cantiello, M., Dadina, M., D’Ammando, F., De Cesare, G., D’Elia, V., Della Valle, M., Iodice, E., Longo, G., Mapelli, M., Masetti, N., Nicastro, L., Palazzi, E., Possenti, A., Radovich, M., Rossi, A., Salvaterra, *Search for the optical counterpart of the GW170814 gravitational wave event with the VLT Survey Telescope*, 2020, MNRAS, 492, 1731, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.492.1731G/>
 - Pintore, F., Marelli, M., Salvaterra, R., Israel, G. L., Castillo, G. A. Rodriguez, Esposito, P., Belfiore, A., Luca, A. De, Wolter, A., Mereghetti, S., Stella, L., Rigoselli, M., Earnshaw, H. P., Pinto, C., Roberts, T. P., Walton, D. J., Bernardini, F., Haberl, F., Salvaggio, C., Tiengo, A., Zampieri, L., Bachetti, M., Brightman, M., Casella, P., D’Agostino, D., Dall’Osso, S., Fuerst, F., Harrison, F. A., Mapelli, M., Papitto, A., Middleton, M., *The Ultraluminous X-Ray Sources Population of the Galaxy NGC 7456*, 2020, ApJ, 890, 166, <https://ui.adsabs.harvard.edu/abs/2020ApJ...890..166P/abstract>
- # – Artale, M. Celeste; Mapelli, Michela; Bouffanais, Yann; Giacobbo, Nicola; Spera, Mario; Pasquato, Mario, *Mass and star formation rate of the host galaxies of compact binary mergers across cosmic time*, 2020, MNRAS, 491, 3419, <https://ui.adsabs.harvard.edu/abs/2020MNRAS.491.3419A/>
- # – Mapelli, Michela; Spera, Mario; Montanari, Enrico; Limongi, Marco; Chieffi, Alessandro; Giacobbo, Nicola; Bressan, Alessandro, *Impact of the rotation and compactness of progenitors on the mass of black holes*, 2020, ApJ, 888, 76, <https://ui.adsabs.harvard.edu/abs/2020ApJ...888...76M/>
- # – Toffano M., Mapelli M., Giacobbo N., Artale M. C., Ghirlanda G., *The host galaxies of double compact objects across cosmic time*, 2019, MNRAS, 489, 4622, <https://ui.adsabs.harvard.edu/abs/2019MNRAS.489.4622T/>
- # – Bouffanais Yann, Mapelli Michela, Gerosa Davide, Di Carlo Ugo N., Giacobbo Nicola, Berti Emanuele, Baibhav Vishal, *Constraining the fraction of binary black holes formed in isolation and young star clusters with gravitational-*

- wave data*, 2019, ApJ, 886, 25, <https://ui.adsabs.harvard.edu/abs/2019ApJ...886...25B/abstract>
- # – Ballone, A., Mapelli, M., Pasquato, M., *A common origin for the circumnuclear disc and the nearby molecular clouds in the Galactic Centre*, 2019, MNRAS, 488, 5802 <https://ui.adsabs.harvard.edu/abs/2019MNRAS.488.5802B/>
 - # – Baibhav, Vishal; Berti, Emanuele; Gerosa, Davide; Mapelli, Michela; Giacobbo, Nicola; Bouffanais, Yann; Di Carlo, Ugo N., *Gravitational-wave detection rates for compact binaries formed in isolation: LIGO/Virgo O3 and beyond*, 2019, Physical Review D, 100, 4060, <https://ui.adsabs.harvard.edu/abs/2019PhRvD.100f4060B/abstract>
 - # – Gnocchi Giuseppe, Maselli Andrea, Abdelsalhin Tiziano, Giacobbo Nicola, Mapelli Michela, *Bounding Alternative Theories of Gravity with Multi-Band GW Observations*, 2019, Physical Review D, 100, 4024, <https://ui.adsabs.harvard.edu/abs/2019PhRvD.100f4024G/abstract>
 - # – Di Carlo Ugo N., Giacobbo Nicola, Mapelli Michela, Pasquato Mario, Spera Mario, Wang Long, Haardt Francesco, *Merging black holes in young star clusters*, 2019, MNRAS, 487, 294, <https://ui.adsabs.harvard.edu/abs/2019MNRAS.487.2947D/abstract>
 - # – Artale M. Celeste, Mapelli Michela, Giacobbo Nicola, Sabha Nadeen B., Spera Mario, Santoliquido Filippo, Bressan Alessandro, *Host galaxies of merging compact objects: mass, star formation rate, metallicity, and colours*, 2019, MNRAS, 487, 1675, <http://adsabs.harvard.edu/abs/2019MNRAS.487.1675A>
 - # – Zappa Francesco, Bernuzzi Sebastiano, Pannarale Francesco, Mapelli Michela, Giacobbo Nicola, *Black-hole remnants from black-hole–neutron-star mergers*, 2019, Physical Review Letters, 123, 1102, <https://ui.adsabs.harvard.edu/abs/2019PhRvL.123d1102Z/abstract>
 - # – Mapelli Michela, Giacobbo Nicola, Santoliquido Filippo, Artale M. Celeste, *The properties of merging black holes and neutron stars across cosmic time*, 2019, MNRAS, 487, 2, <https://ui.adsabs.harvard.edu/abs/2019MNRAS.487...2M/abstract>
 - Carrera R., Pasquato M., Vallenari A., Balaguer-Núñez L., Cantat-Gaudin T.; Mapelli M., Bragaglia A.; Bossini D.; Jordi C.; Galadí-Enríquez D.; Solano E., *Extended halo of NGC 2682 (M 67) from Gaia DR2*, 2019, A&A, 627, 119, <https://ui.adsabs.harvard.edu/abs/2019A%26A...627A.119C/abstract>
 - Cantat-Gaudin T., Jordi C., Wright N. J., Armstrong J. J., Vallenari A., Balaguer-Núñez L., Ramos P., Bossini D., Padoan P., Pelkonen V. M., Mapelli M., Jeffries R. D., *Expanding associations in the Vela-Puppis region: 3D structure and kinematics of the young population*, 2019 A&A, 626, 17, <https://ui.adsabs.harvard.edu/abs/2019A%26A...626A..17C/abstract>
 - # – Bortolas Elisa, Mapelli Michela, *Can supernova kicks trigger EMRIs in the Galactic Centre?*, 2019, MNRAS, 485, 2125, <http://adsabs.harvard.edu/abs/2019MNRAS.485.2125B>
 - # – Spera Mario, Mapelli Michela, Giacobbo Nicola, Trani Alessandro Alberto, Bressan Alessandro, Costa Guglielmo, *Merging black hole binaries with the SEVN code*, 2019, MNRAS, 485, 889, <http://adsabs.harvard.edu/abs/2019MNRAS.485..889S>
 - # – Marassi S., Graziani L., Ginolfi M., Schneider R., Mapelli M., Spera M., Alparone M., *Evolution of dwarf galaxies hosting GW150914-like events*, 2019, MNRAS, 484, 3219, <http://adsabs.harvard.edu/abs/2019MNRAS.484.3219M>
 - # – Giacobbo Nicola, Mapelli Michela, *The impact of electron-capture supernovae on merging double neutron stars*, 2019, MNRAS, 482, 2234, <http://adsabs.harvard.edu/abs/2019MNRAS.482.2234G>
 - Cantat-Gaudin T., Mapelli M., Balaguer-Núñez L., Jordi C., Sacco G., Vallenari A., *A ring in a shell: the large-scale 6D structure of the Vela OB2 complex*, 2019, A&A, 621, 115, <http://adsabs.harvard.edu/abs/2019A%26A...621A.115C>
 - # – Mapelli Michela, Giacobbo Nicola, Toffano Mattia, Ripamonti Emanuele, Bressan Alessandro, Spera Mario, Branchesi Marica, *The host galaxies of double compact objects merging in the local Universe*, MNRAS, 2018, MNRAS, 481, 5324, <http://adsabs.harvard.edu/abs/2018MNRAS.481.5324M>
 - # – Ballone A., Mapelli M., Pasquato M., *Weighing the IMBH candidate CO-0.40-0.22* in the Galactic Centre*, 2018, MNRAS, 480, 4684, <http://adsabs.harvard.edu/abs/2018MNRAS.480.4684B>
 - # – Giacobbo Nicola, Mapelli Michela, *The progenitors of compact-object binaries: impact of metallicity, common envelope and natal kicks*, 2018, MNRAS, 480, 2011, <http://adsabs.harvard.edu/abs/2018MNRAS.480.2011G>
 - # – Mapelli Michela, Giacobbo Nicola, *The cosmic merger rate of neutron stars and black holes*, 2018, MNRAS, 479, 4391, <http://adsabs.harvard.edu/abs/2018MNRAS.479.4391M>
 - # – Trani Alessandro A., Mapelli Michela, Ballone Alessandro, *Forming Circumnuclear Disks and Rings in Galactic Nuclei: A Competition Between Supermassive Black Hole and Nuclear Star Cluster*, 2018, ApJ, 864, 17, <http://adsabs.harvard.edu/abs/2018ApJ...864...17T>

[//adsabs.harvard.edu/abs/2018ApJ...864...17T](https://adsabs.harvard.edu/abs/2018ApJ...864...17T)

- Wolter Anna, Fruscione Antonella, Mapelli Michela, *The X-Ray Luminosity Function of Ultra Luminous X-Ray Sources in Collisional Ring Galaxies*, 2018, ApJ, 863, 43, <https://ui.adsabs.harvard.edu/abs/2018ApJ...863...43W/abstract>
- Moretti A., Poggianti B. M., Gullieuszik M., Mapelli M., Jaffé Y. L., Fritz J., Biviano A., Fasano G., Bettoni D., Vulcani B., D'Onofrio M., *GASP. V. Ram-pressure stripping of a ring Hoag's-like galaxy in a massive cluster*, 2018, MNRAS, 475, 4055, <http://adsabs.harvard.edu/abs/2018MNRAS.475.4055M>
- # - Giacobbo Nicola, Mapelli Michela, Spera Mario, *Merging black hole binaries: the effects of progenitor's metallicity, mass-loss rate and Eddington factor*, 2018, MNRAS, 474, 2959, <http://adsabs.harvard.edu/abs/2018MNRAS.474.2959G>
- # - Bortolas Elisa, Mapelli Michela, Spera Mario, *Star cluster disruption by a massive black hole binary*, 2018, MNRAS, 474, 1054, <http://adsabs.harvard.edu/abs/2018MNRAS.474.1054B>
- Brocato E. et al. (including Michela Mapelli), *GRAWITA: VLT Survey Telescope observations of the gravitational wave sources GW150914 and GW151226*, 2018, MNRAS, 474, 411, <https://ui.adsabs.harvard.edu/abs/2018MNRAS.474..411B/abstract>
- Vulcani Benedetta, Poggianti Bianca M., Moretti Alessia, Mapelli Michela, Fasano Giovanni, Fritz Jacopo, Jaffé Yara, Bettoni Daniela, Gullieuszik Marco, Bellhouse Callum, *GASP. VII. Signs of Gas Inflow onto a Lopsided Galaxy*, 2018, ApJ, 852, 94, <http://adsabs.harvard.edu/abs/2018ApJ...852...94V>
- Mapelli Michela, *Black hole demography at the dawn of gravitational-wave astronomy: state-of-the art and future perspectives*, 2018, Journal of Physics: conference Series, 957, 2001, <http://adsabs.harvard.edu/abs/2018JPhCS.957a2001M>
- # - Mapelli Michela, Giacobbo Nicola, Ripamonti Emanuele, Spera Mario, *The cosmic merger rate of stellar black hole binaries from the Illustris simulation*, 2017, MNRAS, 472, 2422, <http://adsabs.harvard.edu/abs/2017MNRAS.472.2422M>
- Pian E., D'Avanzo P., Benetti S., Branchesi M., Brocato E., Campana S., Cappellaro E., Covino S., D'Elia V., Fynbo J. P. U.,..., Mapelli Michela, et al., *Spectroscopic identification of r-process nucleosynthesis in a double neutron-star merger*, 2017, Nature, 551, 67, <http://adsabs.harvard.edu/abs/2017Natur.551...67P>
- # - Spera Mario, Mapelli Michela, *Very massive stars, pair-instability supernovae and intermediate-mass black holes with the SEVN code*, 2017, MNRAS, 470, 4739, <http://adsabs.harvard.edu/abs/2017MNRAS.470.4739S>
- # - Schneider Raffaella, Graziani Luca, Marassi Stefania, Spera Mario, Mapelli Michela, Alparone Matteo, de Bennassuti Matteo, *The formation and coalescence sites of the first gravitational wave events*, 2017, MNRAS Letters, 471, L105, <http://adsabs.harvard.edu/abs/2017MNRAS.471L..105S>
- Orio Marina, Luna G.J.M., Kotulla R., Gallagher J. S., Zampieri L., Mikolajewska J., Harbeck D., Bianchini A., Chiosi E., Della Valle M., de Martino D., Kaur A., Mapelli M., Munari U., Odendaal A., Trinchieri G., Zemko P., *CXO J004318.8+412016, a steady supersoft X-ray source in M 31*, 2017, MNRAS, 470, 2212, <https://ui.adsabs.harvard.edu/abs/2017MNRAS.470.2212O/abstract>
- # - Bortolas Elisa, Mapelli Michela, Spera Mario, *Supernova Kicks and Dynamics of Compact Remnants in the Galactic Centre*, 2017, MNRAS, 469, 1510, <http://adsabs.harvard.edu/abs/2017MNRAS.469.1510B>
- Mapelli Michela, *Rotation in young massive star clusters*, 2017, MNRAS, 467, 3255, <http://adsabs.harvard.edu/abs/2017MNRAS.467.3255M>
- Sacco G. G., Spina L., Randich S., Palla F., Parker R. J., Jeffries R. D., Jackson R., Meyer M. R., Mapelli Michela, et al., *The Gaia-ESO Survey: Structural and dynamical properties of the young cluster Chamaeleon I*, 2017, A&A, 601, A97, <http://adsabs.harvard.edu/abs/2017A%26A...601A..97S>
- # - Kimpson Thomas O., Spera Mario, Mapelli Michela, Ziosi Brunetto M., *Hierarchical black hole triples in young star clusters: impact of Kozai-Lidov resonance on mergers*, 2016, MNRAS, 463, 2443, <http://adsabs.harvard.edu/abs/2016MNRAS.463.2443K>
- # - Trani Alessandro A., Mapelli Michela, Spera Mario, Bressan Alessandro, *Dynamics of tidally captured planets in the Galactic Center*, 2016, ApJ, 831, 61, <http://adsabs.harvard.edu/abs/2016ApJ...831...61T>
- # - Gavagnin Elena, Mapelli Michela, Lake George, *A critical look at the merger scenario to explain multiple populations and rotation in iron-complex globular clusters*, 2016, MNRAS, 461, 1276, <http://adsabs.harvard.edu/abs/2016MNRAS.461.1276G>

- # – Bortolas E., Gualandris A., Dotti M., Spera M., Mapelli M., *Brownian motion of massive black hole binaries and the final parsec problem*, 2016, MNRAS, 461, 1023, <http://adsabs.harvard.edu/abs/2016MNRAS.461.1023B>
- # – Spera M., Mapelli M., Jeffries R. D., *Do open star clusters evolve toward energy equipartition?*, 2016, MNRAS, 460, 317, <http://mnras.oxfordjournals.org/content/460/1/317>
- Mapelli Michela, *Massive black hole binaries from runaway collisions: the impact of metallicity*, 2016, MNRAS, 459, 3432, <http://adsabs.harvard.edu/abs/2016MNRAS.459.3432M>
- Damiani F., Bonito R., Magrini L., Prisinzano L., Mapelli M., et al., *Gaia-ESO Survey: Gas dynamics in the Carina nebula through optical emission lines*, 2016, A&A, 591, 74, <http://adsabs.harvard.edu/abs/2016A%26A...591A..74D>
- # – Trani A. A., Mapelli M., Bressan A., Pelupessy I. F., van Elteren A., Portegies Zwart S. F., *The influence of dense gas rings on the dynamics of a stellar disk in the Galactic center*, 2016, ApJ, 818, 29, <http://adsabs.harvard.edu/abs/2016ApJ...818...29T>
- # – Mapelli M., Trani A. A., *Modelling the formation of the circumnuclear ring in the Galactic centre*, 2016, A&A, 585, 161, <http://adsabs.harvard.edu/abs/2016A%26A...585A.161M>
- Mapelli M., *Back to the Green Valley: How to Rejuvenate an S0 Galaxy through Minor Mergers*, 2015, Galaxies, vol. 3, issue 4, pp. 192-201, <http://www.mdpi.com/2075-4434/3/4/192>
- Esposito P., Israel G. L., Milisavljevic D., Mapelli M., Zampieri L., Sidoli L., Fabbiano G., Rodríguez Castillo G. A., *Periodic signals from the Circinus region: two new cataclysmic variables and the ultraluminous X-ray source candidate GC X-1*, 2015, MNRAS, 452, 1112, <http://adsabs.harvard.edu/abs/2015MNRAS.452.1112E>
- # – Spera M., Mapelli M., Bressan A., *The mass spectrum of compact remnants from the PARSEC stellar evolution tracks*, 2015, MNRAS, 451, 4086, <http://adsabs.harvard.edu/abs/2015MNRAS.451.4086S>
- Mapelli M., Ripamonti E., *Signatures of planets and protoplanets in the Galactic center: a clue to understand the G2 cloud?*, 2015, ApJ, 806,197, <http://adsabs.harvard.edu/abs/2015ApJ...806..197M>
- Mapelli M., Vallenari A., Jeffries R. D., Gavagnin E., Cantat-Gaudin T., Sacco G. G., Meyer M. R., Alfaro E. J., Costado M., Damiani F., and 15 coauthors, *The Gaia-ESO Survey: N-body modelling of the Gamma Velorum cluster*, 2015, A&A, 578, 35, <http://adsabs.harvard.edu/abs/2015A%26A...578A..35M>
- Esposito P., Israel G. L., de Martino D., D’Avanzo P., Testa V., Sidoli L., Di Stefano R., Belfiore A., Mapelli M., Piranomonte S., and 6 coauthors, *Swift J201424.9+152930: discovery of a new deeply eclipsing binary with 491-s and 3.4-h modulations*, 2015, MNRAS, 450, 1705, <http://adsabs.harvard.edu/abs/2015MNRAS.450.1705E>
- Mapelli M., Rampazzo R., Marino A., *Building gas rings and rejuvenating S0 galaxies through minor mergers*, 2015, A&A, 575, 16, <http://adsabs.harvard.edu/abs/2015A%26A...575A..16M>
- Wolter A., Esposito P., Mapelli M., Pizzolato F., Ripamonti E., *NGC 2276: a remarkable galaxy with a large number of ultraluminous X-ray sources*, 2015, MNRAS, 448, 781, <http://adsabs.harvard.edu/abs/2015MNRAS.448..781W>
- Sacco G. G., Jeffries R. D., Randich S., Franciosini E., Jackson R. J., Cottaar M., Spina L., Palla F., Mapelli M., and 22 coauthors, *The Gaia-ESO Survey: discovery of an extended low-mass population in the Vela OB2 association*, 2015, A&A, 574, L7, <http://adsabs.harvard.edu/abs/2015A%26A...574L...7S>
- Mapelli M., Zampieri L., *Roche-lobe overflow systems powered by black holes in young star clusters: the importance of dynamical exchanges*, 2014, ApJ, 794, 7, <http://adsabs.harvard.edu/abs/2014ApJ...794...7M>
- # – Trani A. A., Mapelli M., Bressan A., *The impact of metallicity-dependent mass loss versus dynamical heating on the early evolution of star cluster*, 2014, MNRAS, 445, 1967, <http://adsabs.harvard.edu/abs/2014MNRAS.445.1967T>
- # – Ziosi B. M., Mapelli M., Branchesi M., Tormen G., *Dynamics of stellar black holes in young star clusters with different metallicities - II. Black hole-black hole binaries*, 2014, MNRAS, 441, 3703 <http://adsabs.harvard.edu/abs/2014MNRAS.441.3703Z>
- Mapelli M., Gualandris A., Hayfield T., *Perturbations induced by a molecular cloud on the young stellar disc in the Galactic Centre*, 2013, MNRAS, 436, 3809 <http://adsabs.harvard.edu/abs/2013MNRAS.436.3809M>
- Mapelli M., Annibali F., Zampieri L., Soria R., *A disrupted bulgeless satellite galaxy as counterpart of the ultraluminous X-ray source ESO 243-49 HLX-1*, 2013, Astronomy & Astrophysics, 559, 124 <http://adsabs.harvard.edu/abs/2013A%26A...559A.124M>
- Esposito P., Israel G. L., Sidoli L., Mapelli M., Zampieri L., Motta S. E., *Discovery of a 6.4-hr black hole binary in NGC 4490*, 2013, MNRAS, 436, 3380, <http://adsabs.harvard.edu/abs/2013MNRAS.436.3380E>

- Mapelli M., Annibali F., Zampieri L., Soria R., *A minor merger scenario for the ultraluminous X-ray source ESO 243-49 HLX-1 - II. Constraints from photometry*, 2013, MNRAS, 433, 849, <http://adsabs.harvard.edu/abs/2013MNRAS.433..849M>
- Mapelli M., Bressan A., *Impact of metallicity on the evolution of young star clusters*, 2013, MNRAS, 430, 3120, <http://adsabs.harvard.edu/abs/2013MNRAS.430.3120M>
- # – Cotini S., Ripamonti E., Caccianiga A., Colpi M., Della Ceca R., Mapelli M., Severgnini P., Segreto A., *The merger fraction of active and inactive galaxies in the local Universe through an improved non-parametric classification*, 2013, MNRAS, 431, 2661, <http://adsabs.harvard.edu/abs/2013MNRAS.431.2661C>
- Mapelli M., Zampieri L., Ripamonti E., Bressan A., *Dynamics of stellar black holes in young star clusters with different metallicities - I. Implications for X-ray binaries*, 2013, MNRAS, 429, 2298, <http://adsabs.harvard.edu/abs/2013MNRAS.429.2298M>
- Ferraro F. R., Lanzoni B., Dalessandro E., Beccari G., Pasquato M., Mocchi P., Rood R. T., Sigurdsson S., Sills A., Vesperini E., Mapelli M., et al., *Dynamical age differences among coeval star clusters as revealed by blue stragglers*, 2012, Nature, 492, 393, <http://adsabs.harvard.edu/abs/2012Natur.492..393F>
- Gualandris A., Mapelli M., Perets H., *Eccentric disc instability in stellar discs formed from inspiralling gas clouds in the Galactic Centre*, 2012, MNRAS, 427, 1793, <http://adsabs.harvard.edu/abs/2012MNRAS.427.1793G>
- # – Fiacconi D., Mapelli M., Ripamonti E., Colpi M., *Adaptive mesh refinement simulations of collisional ring galaxies: effects of the interaction geometry*, 2012, MNRAS, 425, 2255, <http://adsabs.harvard.edu/abs/2012MNRAS.425.2255F>
- Mapelli M., Ripamonti E., Vecchio A., Graham Alister W., Gualandris A., *A cosmological view of extreme mass-ratio inspirals in nuclear star clusters*, 2012, A&A, 542A, 102, <http://adsabs.harvard.edu/abs/2012A%26A...542A.102M>
- Mapelli M., Zampieri L., Mayer L., *A minor merger scenario for the ultraluminous X-ray source ESO 243-49 HLX-1*, 2012, MNRAS, 423, 1309, <http://adsabs.harvard.edu/abs/2012MNRAS.423.1309M>
- Ripamonti E., Mapelli M., *Broad [OIII] in the globular cluster RZ 2109: X-ray ionized nova ejecta?*, 2012, MNRAS, 423, 1144, <http://adsabs.harvard.edu/abs/2012MNRAS.423.1144R>
- Mapelli M., Hayfield T., Mayer L., Wadsley J., *In situ formation of SgrA* stars via disk fragmentation: parent cloud properties and thermodynamics*, 2012, ApJ, 749, 168, <http://adsabs.harvard.edu/abs/2012ApJ...749..168M>
- Mapelli M., Mayer M., *Ring galaxies from off-centre collisions*, 2012, MNRAS, 420, 1158, <http://adsabs.harvard.edu/abs/2012MNRAS.420.1158M>
- Monelli M., Cassisi S., Mapelli M., Bernard E. J., Aparicio A., Skillman E. D., Stetson P. B., Gallart C., Hidalgo S. L., Mayer L., Tolstoy E., *The ACS LCID project VII: the blue straggler population in the isolated dsh galaxies Cetus and Tucana*, 2012, ApJ, 744, 157, <http://adsabs.harvard.edu/abs/2012ApJ...744..157M>
- Mapelli M., Ripamonti E., Zampieri L., Colpi M., *Dynamics of massive stellar black holes in young star clusters and the displacement of ultra-luminous X-ray sources*, 2011, MNRAS, 416, 1756, <http://adsabs.harvard.edu/abs/2011MNRAS.416.1756M>
- Ripamonti E., Mapelli M., Zampieri L., Colpi M., *The metallicity of the nebula surrounding the ultra-luminous X-ray source NGC 1313 X-2*, 2011, Astronomische Nachrichten, 332, 418, <http://adsabs.harvard.edu/abs/2011AN...332..418R>
- Mapelli M., Ripamonti E., Zampieri L., Colpi M., *Remnants of massive metal-poor stars: Viable engines for ultra-luminous X-ray sources*, 2011, Astronomische Nachrichten, 332, 414, <http://adsabs.harvard.edu/abs/2011AN...332..414M>
- Wolter A., Pizzolato F., Rota S., Mapelli M., Ripamonti E., *The population of ULXs in the spiral galaxy NGC 2276*, 2011, Astronomische Nachrichten, 332, 358, <http://adsabs.harvard.edu/abs/2011AN...332..358W>
- Mapelli M., Ripamonti E., Zampieri L., Colpi M., Bressan A., *Ultra-luminous X-ray sources and remnants of massive metal-poor stars*, 2010, MNRAS, 408, 234, <http://adsabs.harvard.edu/abs/2010MNRAS.408..234M>
- # – Mapelli M., Huwyler C., Mayer L., Jetzer Ph., Vecchio A., *Gravitational waves from intermediate-mass black holes in young clusters*, ApJ, 2010, ApJ, 719, 987, <http://adsabs.harvard.edu/abs/2010ApJ...719..987M>
- Zampieri L., Colpi M., Mapelli M., Patruno A., Roberts T. P., *Ultraluminous X-ray Sources forming in low metallicity natal environments*, 2010, AIPC, 1248, 97, <http://adsabs.harvard.edu/abs/2010AIPC.1248...97Z>
- Mapelli M., Ripamonti E., Battaglia G., Tolstoy E., Irwin M. J., Moore B., Sigurdsson S., *Blue straggler stars in dwarf spheroidal galaxies - II. Sculptor and Fornax*, 2009, MNRAS, 396, 1771, <http://adsabs.harvard.edu/abs/>

2009MNRAS.396.1771M

- Mapelli M., Colpi M., Zampieri L., *Low metallicity and ultra-luminous X-ray sources in the Cartwheel galaxy*, 2009, MNRAS, 395L, 71, <http://adsabs.harvard.edu/abs/2009MNRAS.395L..71M>
- Mapelli M., Moore B., *Are ring galaxies the ancestors of giant low surface brightness galaxies?*, 2008, Astronomische Nachrichten, 329, 948, <http://adsabs.harvard.edu/abs/2008AN....329..948M>
- D’Onghia E., Mapelli M., Moore B., *Ring galaxy formation rate and merger history*, 2008, MNRAS, 389, 1275, <http://adsabs.harvard.edu/abs/2008MNRAS.389.1275D>
- Mapelli M., Moore B., Bland-Hawthorn J., *Lopsided galaxies: the case of NGC 891*, 2008, MNRAS, 388, 697, <http://adsabs.harvard.edu/abs/2008MNRAS.388..697M>
- Ripamonti E., Mapelli M., Zaroubi S., *Radiation from early black holes - I: effects on the neutral inter-galactic medium*, 2008, MNRAS, 387, 158, <http://adsabs.harvard.edu/abs/2008MNRAS.387..158R>
- Ghosh K. K., Mapelli M., *UGC 7069: the largest ring galaxy*, 2008, MNRAS, 386L, 38, <http://adsabs.harvard.edu/abs/2008MNRAS.386L..38G>
- Mapelli M., Moore B., Ripamonti E., Mayer L., Colpi M., Giordano L., *Are ring galaxies the ancestors of giant low surface brightness galaxies?*, 2008, MNRAS, 383, 1223, <http://adsabs.harvard.edu/abs/2008MNRAS.383.1223M>
- Mapelli M., Moore B., Giordano L., Mayer L., Colpi M., Ripamonti E., Callegari S., *Intermediate mass black holes and ultra-luminous X-ray sources in the Cartwheel ring galaxy*, 2008, MNRAS, 383, 230, <http://adsabs.harvard.edu/abs/2008MNRAS.383..230M>
- Mapelli M., Ripamonti E., Tolstoy E., Sigurdsson S., Irwin M. G., Battaglia G., *Blue straggler stars in dwarf spheroidal galaxies*, 2007, MNRAS, 380, 1127, <http://adsabs.harvard.edu/abs/2007MNRAS.380.1127M>
- Devecchi B., Colpi M., Mapelli M., Possenti A., *Millisecond pulsars around intermediate-mass black holes in globular clusters*, 2007, MNRAS, 380, 691, <http://adsabs.harvard.edu/abs/2007MNRAS.380..691D>
- Lanzoni B., Sanna N., Ferraro F. R., Valenti E., Beccari G., Schiavon R. P., Rood R. T., Mapelli M., Sigurdsson S., *A Panchromatic Study of the Globular Cluster NGC 1904. I: The Blue Straggler Population*, 2007, ApJ, 663, 1040, <http://adsabs.harvard.edu/abs/2007ApJ...663.1040L>
- Lanzoni B., D’Alessandro E., Ferraro F. R., Mancini C., Beccari G., Rood R. T., Mapelli M., Sigurdsson S., *The Blue Straggler Population of the Globular Cluster M5*, 2007, ApJ, 663, 267, <http://adsabs.harvard.edu/abs/2007ApJ...663..267L>
- Valdes M., Ferrara A., Mapelli M., Ripamonti E., *Constraining darkmatter through 21 cm observations*, 2007, MNRAS, 377, 245, <http://adsabs.harvard.edu/abs/2007MNRAS.377..245V>
- Mapelli M., *Intermediate-mass black holes in dwarf galaxies: the case of Holmberg II*, 2007, MNRAS, 376, 1317, <http://adsabs.harvard.edu/abs/2007MNRAS.376.1317M>
- Ripamonti E., Mapelli M., Ferrara A., *The impact of dark matter decays and annihilations on the formation of the first structures*, 2007, MNRAS, 375, 1399, <http://adsabs.harvard.edu/abs/2007MNRAS.375.1399R>
- Ripamonti E., Mapelli M., Ferrara A., *Intergalactic medium heating by dark matter*, 2007, MNRAS, 374, 1067, <http://adsabs.harvard.edu/abs/2007MNRAS.374.1067R>
- Mapelli M., Sigurdsson S., Ferraro F. R., Colpi M., Possenti A., Lanzoni B., *The radial distribution of blue stragglers and the nature of their progenitors*, 2006, MNRAS, 373, 361, <http://adsabs.harvard.edu/abs/2006MNRAS.373..361M>
- Mapelli M., Ferrara A., Pierpaoli E., *Impact of dark matter decays and annihilations on reionization*, 2006, MNRAS, 369, 1719, <http://adsabs.harvard.edu/abs/2006MNRAS.369.1719M>
- Mapelli M., Ferrara A., Rea N., *Constraints on Galactic Intermediate Mass Black Holes*, 2006, MNRAS, 368, 1340, <http://adsabs.harvard.edu/abs/2006MNRAS.368.1340M>
- Mapelli M., Salvaterra R., Ferrara A., *Gamma-ray constraints on the infrared background excess*, 2006, NewAstronomy, 11, 420, <http://adsabs.harvard.edu/abs/2006NewA...11..420M>
- Mapelli M., Colpi M., Possenti A., Sigurdsson S., *The fingerprint of binary intermediate mass black holes in globular clusters: suprathermal stars and angular momentum alignment*, 2005, MNRAS, 364, 1315, <http://adsabs.harvard.edu/abs/2005MNRAS.364.1315M>
- Mapelli M., Ferrara A., *Background radiation from sterile neutrino decay and reionization*, 2005, MNRAS, 364, 2, <http://adsabs.harvard.edu/abs/2005MNRAS.364....2M>

- Mapelli M., Sigurdsson S., Colpi M., Ferraro F. R., Possenti A., Rood R. T., Sills A., Beccari G., *The Contribution of Primordial Binaries to the Blue Straggler Population in 47 Tucanae*, 2004, ApJL, 605, 29, <http://adsabs.harvard.edu/abs/2004ApJ...605L..29M>
- Colpi M., Mapelli M., Possenti A., *Is NGC 6752 Hosting a Single or a Binary Black Hole?*, 2004, Coevolution of Black Holes and Galaxies, from the Carnegie Observatories Centennial Symposia. Carnegie Observatories Astrophysics Series, <http://adsabs.harvard.edu/abs/2004cbhg.sympE...8C>
- Colpi M., Mapelli M., Possenti A., *Probing the Presence of a Single or Binary Black Hole in the Globular Cluster NGC 6752 with Pulsar Dynamics*, 2003, ApJ, 599, 1260, <http://adsabs.harvard.edu/abs/2003ApJ...599.1260C>

Peer-reviewed Publications, LIGO – Virgo – KAGRA collaboration only.....

The symbol * marks the publications in which I was member of the paper writing team, or the scientific team, or the editorial board, which is analogous to corresponding author

- Abbott R. et al., *All-sky, all-frequency directional search for persistent gravitational waves from Advanced LIGO's and Advanced Virgo's first three observing runs*, 2022, Physical Review D, Volume 105, Issue 12, article id.122001, <https://ui.adsabs.harvard.edu/abs/2022PhRvD.10512001A/abstract>
- Abbott R. et al., *Search of the early O3 LIGO data for continuous gravitational waves from the Cassiopeia A and Vela Jr. supernova remnants*, 2022, Physical Review D, 105, 2005, <https://ui.adsabs.harvard.edu/abs/2022PhRvD.105h2005A/abstract>
- Abbott R. et al., *Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO-Virgo Run O3b*, 2022, ApJ, 928, 186, <https://ui.adsabs.harvard.edu/abs/2022ApJ...928..186A/abstract>
- * – Abbott R. et al., *Search for intermediate-mass black hole binaries in the third observing run of Advanced LIGO and Advanced Virgo*, 2022, A&A, 659, 84, <https://ui.adsabs.harvard.edu/abs/2022A%26A...659A..84A/abstract>
- Abbott R. et al., *All-sky search for short gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run*, 2021, Physical Review D, 104l, 2004, <https://ui.adsabs.harvard.edu/abs/2021PhRvD.104l2004A/abstract>
- Abbott R. et al., *All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data*, 2021, Physical Review D, 104h, 2004, <https://ui.adsabs.harvard.edu/abs/2021PhRvD.104h2004A/abstract>
- Abbott R. et al., *Search for Lensing Signatures in the Gravitational-Wave Observations from the First Half of LIGO-Virgo's Third Observing Run*, 2021, ApJ, 923, 14, <https://ui.adsabs.harvard.edu/abs/2021ApJ...923...14A/abstract>
- Abbott R. et al., *All-sky search for long-duration gravitational-wave bursts in the third Advanced LIGO and Advanced Virgo run*, 2021, Physical Review D, 104j, 2001, <https://ui.adsabs.harvard.edu/abs/2021PhRvD.104j2001A/abstract>
- Abbott R. et al., *Constraints from LIGO O3 Data on Gravitational-wave Emission Due to R-modes in the Glitching Pulsar PSR J0537-6910*, 2021, ApJ, 922, 71, <https://ui.adsabs.harvard.edu/abs/2021ApJ...922...71A/abstract>
- Abbott R. et al., *Searches for Continuous Gravitational Waves from Young Supernova Remnants in the Early Third Observing Run of Advanced LIGO and Virgo*, 2021, ApJ, 921, 80, <https://ui.adsabs.harvard.edu/abs/2021ApJ...921...80A/abstract>
- Abbott R. et al., *All-sky search for continuous gravitational waves from isolated neutron stars in the early O3 LIGO data*, 2021, Physical Review D, Volume 104, Issue 8, article id.082004, <https://ui.adsabs.harvard.edu/abs/2021PhRvD.104h2004A/abstract>
- Abbott R. et al., *Search for anisotropic gravitational-wave backgrounds using data from Advanced LIGO and Advanced Virgo's first three observing runs*, 2021, Physical Review D, 104, 2005, <https://ui.adsabs.harvard.edu/abs/2021PhRvD.104b2005A/abstract>
- Abbott R. et al., *Upper limits on the isotropic gravitational-wave background from Advanced LIGO and Advanced Virgo's third observing run*, 2021, Physical Review D, 104, 2004, <https://ui.adsabs.harvard.edu/abs/2021PhRvD.104b2004A/abstract>
- * – Abbott R. et al., *Observation of Gravitational Waves from Two Neutron Star-Black Hole Coalescences*,

- 2021, ApJ, 915, L5, <https://ui.adsabs.harvard.edu/abs/2021ApJ...915L...5A/abstract>
- Abbott R. et al., *Search for Gravitational Waves Associated with Gamma-Ray Bursts Detected by Fermi and Swift during the LIGO-Virgo Run O3a*, 2021, ApJ, 915, 86, <https://ui.adsabs.harvard.edu/abs/2021ApJ...915...86A/abstract>
 - Abbott R. et al., *Tests of general relativity with binary black holes from the second LIGO-Virgo gravitational-wave transient catalog*, 2021, Physical Review D, 103, 2002, <https://ui.adsabs.harvard.edu/abs/2021PhRvD.10312002A/abstract>
 - Abbott R. et al., *Diving below the Spin-down Limit: Constraints on Gravitational Waves from the Energetic Young Pulsar PSR J0537-6910*, 2021, ApJ, 913, L27, <https://ui.adsabs.harvard.edu/abs/2021ApJ...913L...27A/abstract>
 - Abbott R. et al., *Population Properties of Compact Objects from the Second LIGO-Virgo Gravitational-Wave Transient Catalog*, 2021, ApJ, 913, L7, <https://ui.adsabs.harvard.edu/abs/2021ApJ...913L...7A/abstract>
 - Abbott R. et al., *GWTC-2: Compact Binary Coalescences Observed by LIGO and Virgo during the First Half of the Third Observing Run*, 2021, Physical Review X, 11, 1053, <https://ui.adsabs.harvard.edu/abs/2021PhRvX...11b1053A/abstract>
 - Abbott R. et al., *All-sky search in early O3 LIGO data for continuous gravitational-wave signals from unknown neutron stars in binary systems*, 2021, Physical Review D, 103, 4017, <https://ui.adsabs.harvard.edu/abs/2021PhRvD.103f4017A/abstract>
 - Abbott B. P. et al., *A Gravitational-wave Measurement of the Hubble Constant Following the Second Observing Run of Advanced LIGO and Virgo*, 2021, ApJ, 909, 218, <https://ui.adsabs.harvard.edu/abs/2021ApJ...909...218A/abstract>
 - * – Abbott R. et al., *Properties and Astrophysical Implications of the 150 M_{\odot} Binary Black Hole Merger GW190521*, 2020, ApJ, 900, L13, <https://ui.adsabs.harvard.edu/abs/2020ApJ...900L...13A/abstract>
 - * – Abbott R. et al., *GW190521: A Binary Black Hole Merger with a Total Mass of 150 M_{\odot}* , 2020, Physical Review Letters 125, 1102, <https://journals.aps.org/prl/abstract/10.1103/PhysRevLett.125.101102>
 - Abbott R. et al., *Gravitational-wave Constraints on the Equatorial Ellipticity of Millisecond Pulsars*, 2020, ApJ, 902, L21, <https://ui.adsabs.harvard.edu/abs/2020ApJ...902L...21A/abstract>
 - Abbott R. et al., *GW190814: Gravitational Waves from the Coalescence of a 23 Solar Mass Black Hole with a 2.6 Solar Mass Compact Object*, 2020, ApJ, 896, L44, <https://ui.adsabs.harvard.edu/abs/2020ApJ...896L...44A/abstract>
 - Abbott R. et al., *GW190412: Observation of a Binary-Black-Hole Coalescence with Asymmetric Masses*, 2020, Physical Review D, 102, 3015, <https://ui.adsabs.harvard.edu/abs/2020PhRvD.102d3015A/abstract>
 - Abbott B. P. et al., *GW190425: Observation of a Compact Binary Coalescence with Total Mass $\sim 3.4 M_{\odot}$* , 2020, ApJ, 892, L3, <https://ui.adsabs.harvard.edu/abs/2020ApJ...892L...3A/>
 - Acernese F. et al., *Quantum Backaction on Kg-Scale Mirrors: Observation of Radiation Pressure Noise in the Advanced Virgo Detector*, 2020, Physical Review Letters, 125, 1101, <https://ui.adsabs.harvard.edu/abs/2020PhRvL.125m1101A/abstract>
 - Hamburg R. et al., *A Joint Fermi-GBM and LIGO/Virgo Analysis of Compact Binary Mergers from the First and Second Gravitational-wave Observing Runs*, 2020, ApJ, 893, 100, <https://ui.adsabs.harvard.edu/abs/2020ApJ...893...100H/>
 - Acernese F. et al., *The advanced Virgo longitudinal control system for the O2 observing run*, 2020, Astroparticle Physics, 116, 102386, <https://ui.adsabs.harvard.edu/abs/2020APh...11602386A/>
 - Abbott B. P. et al., *Model comparison from LIGO-Virgo data on GW170817's binary components and consequences for the merger remnant*, 2020, Classical and Quantum Gravity, 37, 5006, <https://ui.adsabs.harvard.edu/abs/2020CQGra...37d5006A/abstract>
 - Abbott B. P. et al., *An Optically Targeted Search for Gravitational Waves emitted by Core-Collapse Supernovae during the First and Second Observing Runs of Advanced LIGO and Advanced Virgo*, 2020, Physical Review D, 101, 4002, <https://ui.adsabs.harvard.edu/abs/2020PhRvD.101h4002A/abstract>
 - Acernese F. et al., *Increasing the Astrophysical Reach of the Advanced Virgo Detector via the Application of Squeezed Vacuum States of Light*, 2019, Physical Review Letters, 123, 1108, <https://ui.adsabs.harvard.edu/abs/2019PhRvL.123w1108A/>

- Abbott B. P. et al., *Search for Gravitational-wave Signals Associated with Gamma-Ray Bursts during the Second Observing Run of Advanced LIGO and Advanced Virgo*, 2019, ApJ, 886, 75, <https://ui.adsabs.harvard.edu/abs/2019ApJ...886...75A/>
- Abbott B. P. et al., *Search for Subsolar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run*, 2019, Physical Review Letters, 123, 1102, <https://ui.adsabs.harvard.edu/abs/2019PhRvL.123p1102A/abstract>
- Abbott B. P. et al., *Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network*, 2019, Physical Review D, 100, 4064, <https://ui.adsabs.harvard.edu/abs/2019PhRvD.100f4064A/>
- * – Abbott B. P. et al., *Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs*, 2019, ApJ, 883, 149, <https://ui.adsabs.harvard.edu/abs/2019ApJ...883..149A/abstract>
- * – Abbott B. P. et al., *Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo*, 2019, ApJ, 882, L24, <https://ui.adsabs.harvard.edu/abs/2019ApJ...882L..24A/abstract>
- Abbott B. P. et al., *All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run*, 2019, Physical Review D, 99, 4033, <http://adsabs.harvard.edu/abs/2019PhRvD..99j4033A>
- Abbott B. P. et al., *All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run*, 2019, PhRvD, 100, 4017, <https://ui.adsabs.harvard.edu/abs/2019PhRvD.100b4017A/>
- Abbott, B. P. et al., *Multi-messenger Observations of a Binary Neutron Star Merger*, 2017, ApJ, 848, L12, <https://ui.adsabs.harvard.edu/abs/2017ApJ...848L..12A/abstract>

INVITED REVIEW PAPERS AND BOOKS.....

- Mapelli Michela, *Formation channels of single and binary stellar-mass black holes*, invited Living Review in "Handbook of Gravitational Wave Astronomy", Section on "Gravitational Wave Sources", Springer Singapore, 2021. Book editors: C. Bambi, S. Katsanevas, K. D. Kokkotas. Section editors: V. Ferrari, L. Gualtieri, K. D. Kokkotas, M. Sakellariadou, G. Schaefer. DOI: https://doi.org/10.1007/978-981-15-4702-7_16-1. ISBN: 978-981-15-4702-7. Peer reviewed. [Link to the book](#); [link to the arxiv entry of this chapter](#). This publication is peer-reviewed.
- Mapelli Michela, *Binary black hole mergers: formation and populations*, 2020, Frontiers in Astronomy and Space Sciences, invited review (peer reviewed), 7, 38, <https://ui.adsabs.harvard.edu/abs/2020FrASS...7...38M/abstract>. This publication is peer-reviewed.
- Mapelli Michela, *Astrophysics of stellar black holes*, summary of the lecture held for the Course 200 "Gravitational Waves and Cosmology" of the International School of Physics "Enrico Fermi", Varenna, Italy, 3 – 12 July 2017. Proceedings of the International School of Physics "E. Fermi", Course 200 "Gravitational Waves and Cosmology", edited by E. Coccia, N. Vittorio and J. Silk, <http://adsabs.harvard.edu/abs/2018arXiv180909130M>
- Mapelli M. & Gualandris A., *Star Formation and Dynamics in the Galactic Centre*, invited review paper, 2016, chapter of the book "Astrophysical Black Holes", in the Lecture Notes in Physics, published by Springer, <https://ui.adsabs.harvard.edu/abs/2016LNP...905..205M/abstract>

WHITE BOOKS.....

- Amaro-Seoane P. et al. (including Michela Mapelli), *Astrophysics with the Laser Interferometer Space Antenna*, 2022, <https://ui.adsabs.harvard.edu/abs/2022arXiv220306016A/abstract>
- Alves Batista R. et al. (including Michela Mapelli), *EuCAPT White Paper: Opportunities and Challenges for Theoretical Astroparticle Physics in the Next Decade*, 2021, <https://ui.adsabs.harvard.edu/abs/2021arXiv211010074A/abstract>
- Kalogera V. et al. (including Michela Mapelli), *The Next Generation Global Gravitational Wave Observatory, The Science Book*, GWIC3G Subcommittee Reports on Next-Generation Ground-Based Observatories, 2021, <https://gwic.ligo.org/>
- Kalogera Vassiliki, Berry Christopher P L, Colpi Monica, Fairhurst Steve, Justham Stephen, Mandel Ilya, Mangiagli Alberto, Mapelli Michela, Mills Cameron, Sathyaprakash B. S., Schneider Raffaella, Tauris Thomas, Valiante Rosa,

Deeper, Wider, Sharper: Next-Generation Ground-Based Gravitational-Wave Observations of Binary Black Holes, White Paper Submitted to Astro2020 (2020 Astronomy and Astrophysics Decadal Survey) by GWIC 3G Science Case Team (GWIC: Gravitational Wave International Committee), <http://adsabs.harvard.edu/abs/2019arXiv190309220K>

- Fiorentino G., Bellazzini M., Ciliegi P., Chauvin G., Douté S., D’Orazi V., Maiorano E., Mannucci F., Mapelli M., Podio L., Saracco P., Spavone M., *MAORY science cases white book*, <http://adsabs.harvard.edu/abs/2017arXiv171204222F>

OTHER NON-REFEREED PUBLICATIONS.....

Symbol # marks publications in collaboration with students and postdocs I supervised or co-supervised.

- # - Ballone, A., Mapelli, M., Trani, A. A., *Formation of the Circumnuclear Disc and the Nearby Molecular Clouds*, 2021, New Horizons in Galactic Center Astronomy and Beyond. ASP Conference Series, Vol. 528, Proceedings of a workshop held 21-24 October 2019 at Keio University, Yokohama, Japan. Edited by Masato Tsuboi and Tomoharu Oka. San Francisco: Astronomical Society of the Pacific, 2021, p.219, <https://ui.adsabs.harvard.edu/abs/2021ASPC..528..219B/abstract>
- # - Sabha, N. B., Mapelli, M., Fiorentino, G., Spera, M., Bellazzini, M., Schreiber, L., *Extreme Young Star Clusters With MAORY+MICADO at the ELT: The Arches Cluster*, 2021, New Horizons in Galactic Center Astronomy and Beyond. ASP Conference Series, Vol. 528, Proceedings of a workshop held 21-24 October 2019 at Keio University, Yokohama, Japan. Edited by Masato Tsuboi and Tomoharu Oka. San Francisco: Astronomical Society of the Pacific, 2021, p.167 <https://ui.adsabs.harvard.edu/abs/2021ASPC..528..167S/abstract>
- # - Ballone, A., Mapelli, M., Bortolas, E., Trani, A. A., *The inner parsecs of our Galaxy: star formation and its environment*, 2020, Memorie della Societa Astronomica Italiana, 91, 201 <https://ui.adsabs.harvard.edu/abs/2020MmSAI..91..201B/abstract>
- # - Rastello, Sara, Di Carlo, Ugo N., Mapelli, Michela, Giacobbo, Nicola, Ballone, Alessandro, *Black Hole dynamics in Young Star Clusters*, 2020, Star Clusters: From the Milky Way to the Early Universe. Proceedings of the International Astronomical Union, Volume 351, pp. 490-493 <https://ui.adsabs.harvard.edu/abs/2020IAUS..351..490R/abstract>
- Mapelli Michela, *Dynamical versus isolated formation channels of gravitational wave sources*, 2019, High-mass X-ray Binaries: Illuminating the Passage from Massive Binaries to Merging Compact Objects. Proceedings of the International Astronomical Union, Volume 346, pp. 397-416, <https://ui.adsabs.harvard.edu/abs/2019IAUS..346..397M/abstract>
- # - Artale, M. Celeste, Giacobbo, Nicola, Mapelli, Michela, Esposito, Paolo, *The High Mass X-ray binaries in star-forming galaxies*, 2019, High-mass X-ray Binaries: Illuminating the Passage from Massive Binaries to Merging Compact Objects. Proceedings of the International Astronomical Union, Volume 346, pp. 332-336, <https://ui.adsabs.harvard.edu/abs/2019IAUS..346..332A/abstract>
- Mapelli Michela, *Black hole demography at the dawn of gravitational-wave astronomy: state-of-the art and future perspectives*, 2018, Journal of Physics: Conference Series, Volume 957, Issue 1, article id. 012001, <http://adsabs.harvard.edu/abs/2018JPhCS.957a2001M>
- # - Giacobbo Nicola, Mapelli Michela, Spera Mario, *Unravelling the progenitors of merging black hole binaries*, to appear in Proceedings of Science; proceeding of the GRAvitational-waves Science & technology Symposium - GRASS2018, 1-2 March 2018, Palazzo Moroni, Padua (Italy), <http://adsabs.harvard.edu/abs/2018arXiv180707568G>
- # - Bortolas Elisa, Mapelli Michela, Spera Mario, *Star Cluster Disruption by a Supermassive Black Hole Binary*, to appear in Proceedings of Science; proceeding of the GRAvitational-waves Science & technology Symposium - GRASS2018, 1-2 March 2018, Palazzo Moroni, Padua (Italy), <http://adsabs.harvard.edu/abs/2018arXiv180506888B>
- Mapelli Michela, *The Maxwell’s demon of star clusters*, Submitted Manuscript Under Review: To appear in The Impact of Binaries on Stellar Evolution, Beccari G. & Boffin H.M.J. (Eds.)© 2018 Cambridge University Press, <http://adsabs.harvard.edu/abs/2018arXiv180707944M>
- # - Alessandro A. Trani, Mapelli Michela, Spera Mario, Bressan Alessandro, *Dynamics of tidally captured planets in the Galactic Center*, to appear in Memorie della SAI (proceedings of the Modest 16 conference, 18-22 April 2016, Bologna, Italy), <http://adsabs.harvard.edu/abs/2016arXiv160707438T>

- # – Bortolas Elisa, Mapelli Michela, Spera Mario, *Dynamics of supernova remnants in the Galactic Centre*, to appear in Memorie della SAIIt (proceedings of the Modest 16 conference, 18-22 April 2016, Bologna, Italy), <http://adsabs.harvard.edu/abs/2016arXiv160606851B>
- # – Spera Mario, Giacobbo Nicola, Mapelli Michela, *Shedding light on the black hole mass spectrum*, to appear in Memorie della SAIIt (proceedings of the Modest 16 conference, 18-22 April 2016, Bologna, Italy), <http://adsabs.harvard.edu/abs/2016arXiv160603349S>
 - Mapelli Michela, *Collisions versus stellar winds in the runaway merger scenario: place your bets*, to appear in Memorie della SAIIt (proceedings of the Modest 16 conference, 18-22 April 2016, Bologna, Italy), <http://adsabs.harvard.edu/abs/2016arXiv160603370M>
- # – Branchesi M., Woan G., Astone P., Bartos I., Colla A., Covino S., Drago M., Fan X., Frasca S., Hanna C., Haskell B., Hazboun J. S., Heng I. S., Holz D. E., Johnson-McDaniel N. K., Jones I. D., Keer L., Klimentko S., Kostas G., Larson S. L., Mandel I., Mapelli M., et al., *C7 Multi-messenger astronomy of GW sources*, 2014, General Relativity and Gravitation, 46, 1771, <http://link.springer.com/article/10.1007/s10714-014-1771-6>
 - Zampieri L., Mapelli M., *Exploring the formation of binary systems of Ultraluminous X-ray Sources*, 2014, The X-ray Universe 2014, edited by Jan-Uwe Ness. Online at <http://adsabs.harvard.edu/abs/2014xru.confE.211Z>
- # – Mapelli M., Trani A. A., Bressan A., *The impact of metallicity and dynamics on the evolution of young star clusters*, in Massive Young Star Clusters Near and Far: From the Milky Way to Reionization. 2013 Guillermo Haro Conference, Eds. Y. D. Mayya, D. Rosa González and E. Terlevich. INAOE & AMC, June 2014. ISBN: 978-607-8379-01-9, pp. 137-140, <http://adsabs.harvard.edu/abs/2014mysc.conf..137M>
 - Mapelli M., *The missing link between ultraluminous X-ray sources and metallicity*, 2013, in Half a Century of X-ray Astronomy, Proceedings of the conference held 17-21 September, 2012 in Mykonos Island, Greece, <http://adsabs.harvard.edu/abs/2013hcxa.confE..80M>
 - Mapelli M., Annibali F., Zampieri L., *Shedding light on the nature of ESO 243-49 HLX-1*, 2013, in Half a Century of X-ray Astronomy, Proceedings of the conference held 17-21 September, 2012 in Mykonos Island, Greece, <http://adsabs.harvard.edu/abs/2013hcxa.confE.130M>
 - Wolter A., Villani M., Pizzolato F., Mapelli M., Ripamonti E., *ULXs in the bright spiral NGC 2276*, 2013, Proceedings of the conference held 17-21 September, 2012 in Mykonos Island, Greece, <http://adsabs.harvard.edu/abs/2013hcxa.confE.129W>
 - Mapelli M., *X-ray binaries powered by massive stellar black holes*, 2013, X-ray Astronomy: towards the next 50 years!, Proceedings of the conference held October 1-5, 2012 in Milan, Italy, Memorie della SAIIt, 84, 635, <http://adsabs.harvard.edu/abs/2013MmSAI..84..635M>
 - Mapelli M., Bressan A., *Young star cluster evolution and metallicity*, 2013, to appear in Stellar Populations 55 years after the Vatican conference, Proceedings of the Symposium 6 of the European Week of Astronomy and Space Science 2012 (EWASS 2012), held July 2-4, 2012 in Roma, Italy. To be published on Mem. SAIIt, <http://adsabs.harvard.edu/abs/2013arXiv1302.2328M>
 - Zampieri L., Mapelli M., Ripamonti E., Colpi M., Pintore F., *Challenging Ultraluminous X-ray Sources*, 2011, in "The X-ray Universe 2011, Presentations of the Conference held in Berlin, Germany, 27-30 June 2011, <http://adsabs.harvard.edu/abs/2011xru.conf..176Z>
 - Mapelli M., Moore B., Ripamonti E., Giordano L., Mayer L., Colpi M., Callegari S., *Are ring galaxies the ancestors of giant low surface brightness galaxies?*, 2009, in "The Galaxy Disk in Cosmological Context"; Proceedings of the IAU Symposium, Volume 254, p.41; Copenhagen; 9-13 June 2008; eds. J. Anderson, J. Bland-Hawthorn, B. Nordstrom, <http://adsabs.harvard.edu/abs/2009IAUS..254P..41M>
 - Mapelli M., Moore B., Bland-Hawthorn J., *The origin of lopsidedness in galaxies*, 2009, in "The Galaxy Disk in Cosmological Context"; Proceedings of IAU Symposium, Volume 254, p.40; Copenhagen; 9-13 June 2008; eds. J. Anderson, J. Bland-Hawthorn, B. Nordstrom, <http://adsabs.harvard.edu/abs/2009IAUS..254P..40M>
 - Devecchi B., Colpi M., Mapelli M., Possenti A., *On the Dynamical Capture of a MSP by an IMBH in a Globular Cluster*, 2008, in "Dynamical Evolution of Dense Stellar Systems", Proceedings of the IAU Symposium, Volume 246, p. 359, <http://adsabs.harvard.edu/abs/2008IAUS..246..359D>
 - Mapelli M., Ripamonti E., *Primordial gas heating by dark matter and structure formation*, 2007, Memorie della Societa Astronomica Italiana, v.78, p.800, proceedings of the LI Congress of the SAIIt, April 16-20 2007, Firenze, <http://adsabs.harvard.edu/abs/2007MmSAI..78..800M>
 - Mapelli M., Ripamonti E., *Impact of dark matter on reionization and heating*, 2008, in "THE ELEVENTH MARCEL GROSSMANN MEETING On Recent Developments in Theoretical and Experimental General Relativity, Gravita-

- tion and Relativistic Field Theories". Proceedings of the MG11 Meeting on General Relativity, held 23-29 July 2006 in Berlin, Germany. Edited by Hagen Kleinert (Freie Universität Berlin, Germany), Robert T Jantzen (Villanova University, USA), editor of the Marcel Grossmann Meeting series: Remo Ruffini (University of Rome "La Sapienza" Italy) . Published by World Scientific Publishing Co. Pte. Ltd., 2008. ISBN #9789812834300, pp. 979-981, <http://adsabs.harvard.edu/abs/2007astro.ph..1672M>
- Ripamonti E., Mapelli M., *Impact of dark matter decays and annihilations on structure formation*, 2008, in "THE ELEVENTH MARCEL GROSSMANN MEETING On Recent Developments in Theoretical and Experimental General Relativity, Gravitation and Relativistic Field Theories". Proceedings of the MG11 Meeting on General Relativity, held 23-29 July 2006 in Berlin, Germany. Edited by Hagen Kleinert (Freie Universität Berlin, Germany), Robert T Jantzen (Villanova University, USA), editor of the Marcel Grossmann Meeting series: Remo Ruffini (University of Rome "La Sapienza" Italy). Published by World Scientific Publishing Co. Pte. Ltd., 2008. ISBN #9789812834300, pp. 982-984, <http://adsabs.harvard.edu/abs/2008mgm..conf..982R>
 - Colpi M., Devecchi B., Mapelli M., Patruno A., Possenti A., *The dynamical fingerprint of intermediate mass black holes in globular clusters*, 2005, Invited review in: "Interacting Binaries: Accretion, Evolution, and Outcomes", AIP Conference Proceedings, v. 797, p. 205, <http://adsabs.harvard.edu/abs/2005AIPC..797..205C>
 - Mapelli M., Salvaterra R., Ferrara A., *Extragalactic Background Light: new constraints from the study of the photon-photon absorption on blazar spectra*, Proceedings of "Baryons in Dark Matter Halos", 5-9 October 2004, Novigrad, Croatia. Editors: R. Dettmar, U. Klein, P. Salucci. Published by SISSA, Proceedings of Science, <http://pos.sissa.it>, p.12, <http://adsabs.harvard.edu/abs/2004bdmh.confE..12M>