

Elena Amato

INAF - Osservatorio Astrofisico di Arcetri
Largo E. Fermi, 5
50125 - Firenze, Italy

Office: +39 055 2752 236
Fax: +39 055 220039
e-mail: elena.amato@inaf.it
PEC: elena_amato@pec.it
[ORCID: 0000-0002-9881-8112](https://orcid.org/0000-0002-9881-8112)

| | | |
|----------------------------|--|----------------|
| CURRENT POSITIONS | Lead Researcher INAF - Osservatorio Astrofisico di Arcetri | 2024 - |
| | Deputy Director INAF - Osservatorio Astrofisico di Arcetri | 2024– |
| | Visiting Professor Gran Sasso Science Institute, L'Aquila, Italy | 2021– |
| | Contract Professor University of Florence, Italy | 2017– |
| PREVIOUS POSITIONS | Researcher INAF - Osservatorio Astrofisico di Arcetri | 2001 –2023 |
| ACADEMIC QUALIFICATIONS | National Habilitation as full professor | 2020 |
| | National Habilitation as associate professor | 2013 |
| | Ph.D. in Astronomy, University of Florence, Italy | 2001 |
| | Master in Physics, University of Florence, Italy | 1998 |
| VISITING POSITIONS | Visiting Professor, Gran Sasso Science Institute (GSSI), L'Aquila, Italy, 2 weeks/year | 2022 - |
| | Visiting scientist at KITP, Santa Barbara, CA, USA for 1 month | 2005–2009–2019 |
| RESEARCH INTERESTS | My research interests are in the field of <i>theoretical High Energy Astrophysics</i> . From the point of view of basic physics processes, I am interested in the <i>acceleration and transport of relativistic particles</i> and the <i>physics of relativistic plasmas</i> . From the point of view of specific astrophysical sources and phenomena, my interests cover <i>Cosmic Rays</i> , <i>Supernova Remnants</i> , <i>Pulsar Wind Nebulae</i> and galactic sources of non-thermal emission in general. | |

IMPACT OF RESEARCH

My research has led to the publication of

- **85** short author list articles in peer-reviewed international journals
- **11** peer-reviewed articles within large international collaborations
- more than **30** conference proceedings
- **2** contributions to books
- several contributions to roadmaps

with a total of more than **6500 citations**, **H-index 47** and **normalized H-index 25** according to ADS. A complete list of my publications can be found [here](#). The results of my research have granted me invitations to deliver

- more than 30 invited talks at national and international conferences in the last ten years
- more than 10 colloquia in Research Institutes in the last 5 years

ADDITIONAL ACTIVITIES

Besides doing research, I have been engaged in a number of other activities. These include: teaching University courses, supervising students and postdocs; obtaining and managing research funds; serving as a member of scientific panels, and as a reviewer for several science funding agencies worldwide and for all the main international journals in the field of Astrophysics. A more extended version of my CV can be found [here](#).

REGULAR TEACHING ACTIVITY

| | |
|--|-----------|
| <i>Plasma Physics around Astrophysical Compact Objects</i> | 2022– |
| PhD course, 12 hr/year | |
| Gran Sasso Science Institute (GSSI), L'Aquila, Italy | |
| <i>High Energy Astrophysics</i> | 2016– |
| master course, 18 hr/yr | |
| University of Florence | |
| <i>Cosmic Accelerators</i> | 2012–2016 |
| PhD course, 6 hr/yr | |
| University of Florence | |

SUPERVISING

Supervisor of 7 postdoctoral fellows, 1 pre-doctoral fellow, 2 PhD students and 6 undergraduate students in the last 10 years

| | | | |
|---|--|------------------|-----------|
| RESEARCH GRANTS AS PI | PRIN MUR 2022 <i>Unveiling the footprints of the cosmic ray journey through the Galaxy and beyond</i> | National PI | 2023– |
| | PRIN INAF 2019 <i>From massive stars to supernovae and supernova remnants: driving mass, energy and cosmic rays in our Galaxy</i> | Research Unit PI | 2020–2024 |
| | 2017-14-H.0 ASI-INAf - second call <i>On the escape of cosmic rays and their impact on the background plasma</i> | National PI | 2019–2023 |
| | INAf - Mainstream Research <i>Understanding Particle Acceleration in Galactic Sources in the CTA era</i> | National PI | 2019–2022 |
| | 2017-14-H.0 ASI-INAf - first call: <i>A Modern Approach to Cosmic Ray Transport in the Galaxy</i> | Research Unit PI | 2018 |
| | CTA-SKA INAF 2016: <i>Probing particle acceleration and γ-ray propagation with CTA and its precursors</i> | Research Unit PI | 2017-2020 |
| SCIENTIFIC PANELS AND COMMITTEES | CRACHEN PROGRAM (Scheda INAF) <i>Cosmic Ray Acceleration to the Highest Energies</i> funded by INAF with > 300 keuro in the last 3 years | National PI | 2017– |
| | member of IUPAP (International Union for Pure and Applied Physics) commission C4 : Astro-particle Physics | | 2025– |
| | vice-president of the INAF Computation time and storage allocation committee (CAT&S) | | 2023– |

Firenze, July 24, 2025

Signed

