europass

ai fini della pubblicazione

Luca Graziani

Nationality: Italian | **Gender** Do not indicate | (+39) 0000 |

www.linkedin.com/in/lgastro | Italy

WORK EXPERIENCE

01/01/1995 – 01/01/2007 – Firenze, Italy
SOFTWARE ARCHITECTS – IBM BUSINESS PARTNERS

PROFESSIONAL EXPERIENCE (Excerpt)
IBM/IBM Business Partner: Working experience in the field of Information Technology as Software Developer & Architect with SUN and IBM technologies.

Professional development in Java Enterprise IBM Websphere Portals
Databases: IBM DB2

Programming with OO: Java EE, IBM Visualage C++, IBM Visualage SmallTalk, IBM Voice Technologies in IT industry (IBM business partners network).

Teaching experience to Professionals (IBM business partners network / IBM Learning services) and High School Students.

18/04/2012 – 31/10/2013 – Muenchen, Germany
DFG POST-DOCTORAL RESEARCHER DFG POST-DOCTORAL RESEARCHER (1.5 YRS) PRIORITPROGRAM 1573: PHYSICS OF THE INTERSTELLAR MEDIUM. – MAX PLANCK INSTITUTE OF ASTROPHYSICS (MPA), GARCHING, GERMANY, MONACO DI BAVIERA (GERMANIA)

Max Planck Institute of Astrophysics (MPA), Garching, Germany
Research topics: Radiative transfer, Reionization, X-Rays physics,
QSOs, Metals in IGM, AMR schemes.

01/06/2014 – 31/05/2017 – Monte Porzio Catone, Roma, Italy
YOUNG SCIENTIST ERC FUNDED PROJECT FIRST – ERC FUNDED PROJECT FIRST. INAF, OSSERVATORIO ASTRONOMICO DI ROMA (OAR), ROMA (ITALIA)

INAF, Osservatorio Astronomico di Roma (OAR).
Research topics: Radiative transfer, Reionization, Galaxy Formation models in Local Group,
Dust formation and evolution, Radiative Transfer through cosmic dust, SPH schemes .

10/07/2017 – 09/07/2018 – Pisa, Italy
ASSEGNISTA DI RICERCA SCUOLA NORMALE SUPERIORE DI PISA, COSMOLOGY GROUP – SCUOLA NORMALE SUPERIORE DI PISA

Research topics: Radiative transfer, Reionization, Galaxy Formation models in Local Group,
Dust formation and evolution, Radiative Transfer through cosmic dust, SPH schemes, QSOs formation and evolution, QSO environments .

01/05/2019 – 30/04/2021 – Roma, Italy

ARC FELLOW, AMALDI RESEARCH CENTER FOR GRAVIATTIONAL PHYSICS AND ASTROPHYSICS – LA SAPIENZA, UNIVERSITY OF ROME

Research topics: Numerical Galaxy formation and evolution with hydrodynamical simulations (dustyGadget)
Milky Way and the Local group formation with semi-numerical pipelines (GAMESH)
Comsic reionization, radiative transfer, metal lines (SKIRT, Cloudy, CRASH)
Gravitational Waves hosts and formation sites (SeBA, MOBSE+ GAMESH)

EDUCATION AND TRAINING

01/09/1987 – 01/07/1992 – Pisa, Italy
MATURITA´ SCIENTIFICA – Liceo Scientifico Galileo Galilei, Macerata (Italia)

https://www.scientificomc.it/pvw/app/MCLS0001/pvw_sito.php

01/01/1998 – 01/12/2001 – France
DELF – DIPLÔME D'ÉTUDES EN LANGUE FRANÇAISE – République française – Ministère de l'éducation nationale - France

https://www.france-education-international.fr/

01/01/2001 – 01/12/2002 – France
DALF – DIPLÔME APPROFONDI DE LANGUE FRANÇAISE – CEF LEVEL: C2 – République française – Ministère de l'éducation nationale - France

https://www.france-education-international.fr/

01/05/2003 – 02/05/2003
MPI AND OPENMP PROGRAMMING COURSES – CINECA

https://www.cineca.it/

01/09/2002 – 01/06/2005
BSC PHYSICS – University of Pisa, Physics department

https://www.df.unipi.it/it/ricerca/ricerca

01/06/2007 – 14/06/2007
SCHOOL ON PARALLEL COMPUTING XVI – CINECA

https://www.cineca.it/

01/07/2007 – 07/07/2007
ADVANCED SCHOOL ON PARALLEL COMPUTING III – CINECA

https://www.cineca.it/

10/07/2007 – 17/07/2007
SUMMER SCHOOL ON SCIENTIFIC VISUALIZATION VII – CINECA

www.cineca.it

01/09/2005 – 16/12/2008
MSC GENERAL PHYSICS AND ASTROPHYSICS – University of Florence - Dept. Of Physics and Astronomy

https://www.fisica.unifi.it/

01/06/2010 – 07/06/2010
EUROPEAN-US PHD SUMMER SCHOOL ON HPC CHALLENGES IN COMPUTATIONAL SCIENCES – PRACE - XSEDE

https://training.prace-ri.eu/

01/07/2010 – 07/07/2010
5TH HEIDELBERG IMPRS SUMMER SCHOOL: FIRST STARS AND COSMIC REIONIZATION – IMPRS - Heidelberg

https://www.imprs-hd.mpg.de/

01/09/2008 – 12/04/2012 – Muenchen, Germany
PHD / DR. RER. NAT. IN ASTRONOMY AND ASTROPHYSICS – LMU University Munich / Max Planck Institute for Astrophysics

https://www.lmu.de/en/index.html

01/09/2008 – 30/04/2012
THE INTERNATIONAL MAX PLANCK RESEARCH SCHOOL ON ASTROPHYSICS AT THE LUDWIG MAXIMILIANS UNIVERSITY MUNICH – Max Planck Institute for Astrophysics (MPA)

https://www.imprs-astro.mpg.de/

01/06/2014 – 07/06/2014
KROME BOOTCAMP PHD COMPUTATIONAL SCHOOL – University of Goettingen, Goettingen , Germany

http://kromepackage.org/bootcamp/

22/01/2021
IBM CERTIFICATE AI0101EN: AI FOR EVERYONE: MASTER THE BASICS – IBM Online Training - edX

https://courses.edx.org/certificates/44b3a705e1e6435bbad9617bb963bb26

06/03/2021
IBM CERTIFICATE AI102EN: INTRODUCTION TO WATSON AI – IBM online training - edX

https://courses.edx.org/certificates/5be6d5f430144dec89fb71488b0727d3

LANGUAGE SKILLS

Mother tongue(s): ITALIAN

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
FRENCH	C2	C2	C2	C2	C2
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Operating Systems - Client and Server

Microsoft Windows, since windows NT 4 | RedHAt Linux Enterprise 3, 5, 7 and 8 | System Administration - UNIX and Windows | IBM AIX | IBM OS/2 Warp and Server | Oracle Solaris for Intel | Openuse Leap Linux Desktop | SCO UnixWare

Procedural - Imperative Programming - Compilers and languages

IBM FORTRAN XL | Intel FORTRAN | IBM xLC | C Programming language

Object Oriented Programming - Compilers-IDE and languages

IBM Websphere Application developer | Smalltalk Programming language | Eclipse Platform | IBM VisualAge for Java, C++, Smalltalk | Java Programming language | Intel Parallel studio for C++ and Fortran | C++ Programming language

High Performance Computing

MPI | Native Threads | Apache Derby | OpenMP | Java concurrent libraries | Intel MKL Libraries

AI, Machine Learning, Deep Learning

IBM Watson Studio

Server Platforms for Data and Application Development

IBM Websphere Application Server | Relational Databases | IBM DB2 | IBM HTTP Server | Apache Tomcat | SQL | MySQL

Academic CV of Luca Graziani, PhD

CV valido ai fini della pubblicazione

May 15, 2021

Personal details

Nationality: Italian

Spoken languages:
Italian (mother tongue)
French (C2 level, DALF)
English (Professional usage)
Web profiles:
Linkedin: https://www.linkedin.com/in/lgastro
ResearchGate: https://www.researchgate.net/profile/Luca_Graziani
Publons: https://publons.com/researcher/1412778/luca-graziani/
EU Zenodo: www.zenodo.org/search?page=1&size=20&q=%22Luca%20Graziani%22
NASA ADS: https://ui.adsabs.harvard.edu/search/p0&q=orcid%3A0000-0002-9231-1505
Google Scholar: https://scholar.google.it/citations?userht25LkQAAAAJ&hl=it

Education/Academic records

- **PhD / Dr. rer. nat. in Astronomy and Astrophysics** 2012
  Ludwig Maximilian University of Munich (LMU)
  Ph.D. Thesis: Cosmological radiative transfer through metals in CRASH.
  Final Marks: 1.3/1 German scores, Magna cum Laude
  Supervisors: Prof. Simon White and Dr. Benedetta Ciardi.
  Available at: http://edoc.ub.uni-muenchen.de/14935/
  doi:10.5281/zenodo.1495252

- **International Max Planck Research School (IMPRS) on Astrophysics** 2012
  Max Planck Institute for Astrophysics (MPA) Garching - Germany.

- **Master of Science in Physics and Astrophysics / Laurea Specialistica (20s)** 2008
  Astrophysics and Space Science Dept., University of Florence - Italy
  M.Sc. Thesis: Radiative transfer in dusty protoplanetary disks.
  (Il trasporto della radiazione nei dischi protoplanetari: il ruolo della polvere.)
  Final Marks: 110/110 Italian scores
  Supervisor: Prof. Egidio Landi degli Innocenti and Prof. Santi Aiello.
  doi:10.5281/zenodo.1495276

- **Bachelor of Science in Physics / Laurea Triennale (25s)** 2005
  Physics Dept., University of Pisa - Italy
  B.Sc. Thesis: Numerical methods in Planetary System Dynamics.
  (Metodi numerici per la soluzione di problemi di dinamica planetaria.)
  Supervisor: Prof. P. Paolicchi.

- **DALF – Diplôme approfondi de langue française – CEF Level: C2**, 2002
  République française – Ministère de l'éducation nationale - France.

- **DELF – Diplôme d'études en langue française.**, 2001
  République française – Ministère de l'éducation nationale - France.

PhD Schools and Advanced Schools

- **KROME bootcamp PhD computational school** 2014
  University of Goettingen - Germany.
- **5th Heidelberg IMPRS Summer School: First Stars and Cosmic Reionization** 2010
  International Max Planck Research School for Astronomy and Cosmic Physics,
  University of Heidelberg - Germany.
- **EU/US PhD Summer School on HPC Challenges in Computational Sciences** 2010
  Acireale - Italy. DEISA and TeraGrid – Europe USA – **DEISA Grant Fellow**
- **School on parallel computing XVI** 2007
  CINECA - Bologna - Italy.
- **Advanced school on parallel computing III** 2007
  CINECA - Bologna - Italy.
- **Summer School on Scientific Visualization VII** 2007
  CINECA - Bologna - Italy. 2007
- **MPI and OpenMP Programming courses** 2003
  CINECA Supercomputing dept., Bologna - Italy

eLearning / Professional certifications

- **NVIDIA Deep Learning Institute: Fundamentals of Accelerated Computing with CUDA C/C++** 2021
- **IBM online certification: Introduction to Watson AI (AI102EN)** 2021
  Verified certificate: https://courses.edx.org/certificates/5be6d5f430144dec89fb71488b0727d3
- **IBM online certification: AI for Everyone: Master the Basics (AI0101EN)** 2021
  Verified certificate: https://courses.edx.org/certificates/44b3a705e1e6435bbad9617bb963bb26
- **EU Research: Open Access Week 2018** 2018
  A series of webinars and tutorials organized by OpenAIRE and FOSTER
  Available at: http://openaccessweek.org/
- **EU Research/RDA: Open Science Webinar Series 2018** 2018
  A series of webminars offered by OpenAIRE, IOSSG and RDA Italian node
  Available at: www.rd-alliance.org/group/rda-italy/wiki/open-science-webinar-series-2018

Post-Doctoral Research Experience in Astrophysics (~ 7.5 yrs)

- **ARC Fellow** (2 yrs) 2019-2021
  Amaldi Research Center, La Sapienza University of Rome, Physics dept.
  Research topics: Multi-Messenger Astronomy, Binary Black Hole formation and coalescence sites, Galaxy Formation models in Local Group, Dust formation and evolution, Radiative Transfer through cosmic dust, Reionization, SPH schemes, QSOs formation and evolution and environments.

- **Research Collaborator** 2018-2019
  University of Rome, La Sapienza, Physics dept.
  Research topics: Radiative transfer, Reionization, Galaxy Formation models in Local Group, Dust formation and evolution, Radiative Transfer through cosmic dust, SPH schemes, QSOs formation and evolution, QSO environments.

- **Assegnista di ricerca / PostDoc Researcher** (1 yr) 2017-2018
  Scuola Normale Superiore di Pisa, Cosmology Group.
  Research topics: Radiative transfer, Reionization, Galaxy Formation models in Local Group, Dust formation and evolution, Radiative Transfer through cosmic dust, SPH schemes, QSOs formation and evolution, QSO environments.

- **Young Scientist / ERC funded project FIRST** (3 yrs) 2014-2017
  INAF, Osservatorio Astronomico di Roma (OAR).
  Research topics: Radiative transfer, Reionization, Galaxy Formation, Models in Local Group, Dust formation and evolution, Radiative Transfer through cosmic dust, SPH schemes.

- **Borsa di studio / ERC funded project FIRST** (4 months) 2013-2014
  INAF, Osservatorio Astronomico di Roma (OAR).
  Research topics: Radiative transfer, Reionization, Galaxy Formation models in Local Group.

- **DFG Post-doctoral researcher / SPP 1573 ISM.** (1.5 yrs) 2012-2013
  Max Planck Institute of Astrophysics (MPA), Garching, Germany
  Research topics: Radiative transfer, Reionization, X-Rays physics, QSOs, Metals in IGM, AMR schemes.

Visiting and long term scientific programs

- **University of Southampton -Visiting fellow** 2019-present
  The University of Southampton, Southampton, United Kingdom.

- **Galaxy Evolution in a New Era of HI Surveys -MIAPP (2 weeks)** 2019
  Excellence Cluster 'Universe' MIAPP Germany.

- **The cold universe program -Visitor (1.5 Months)** 2016
  KITP Kavli Institute for theoretical physics, Santa Barbara, California, USA.

- **Scuola Normale Superiore -Ext. Sci. Collaborator** 2016
  Scuola Normale Superiore, Pisa, Italy.

- **Scuola Normale Superiore -Visitor (3 Months)** 2014
  Scuola Normale Superiore, Pisa, Italy.

- **School of Physics, Cosmology Group -Visitor (3 weeks)** 2012
  University of Melbourne, School of Physics, Melbourne, Australia.

- **Harish-Chandra Research Institute (HRI) -Visitor (2 weeks)** 2010
  Harish-Chandra Research Institute (HRI), Allahabad, India.

Collaborations / Memberships

Present collaborations:

- **High-z Universe**

  CAESAR: Cosmology And Early Structure Assembly in Rome
  Available at: https://www.oa-roma.inaf.it/caesar/

  Athena mission: SWG 2.1: Formation and growth of earliest SMBH
  Available at: https://www.the-athena-x-ray-observatory.eu

  Theseus mission: SWG1 group
  Available at: http://isdc.unige.ch/theseus/

  SKA Telescope. CD/EoR Science group
  Available at: https://www.skatelescope.org/

  Rebels collaboration: "Reionization Era Bright Emission Line Survey"
  Available at: https://sites.google.com/site/rebelswiki/

- **Gravitational Wave Astronomy**

  LISA mission: Astrophysics Working Group
  Available at: https://www.lisamission.org/

  ASTRO-Black ITALY
  Available at: www.lisamission.org

  TEONGRAV: Theory of Gravitational Wave Sources
  Available at: https://web.infn.it/CSN4/index.php/it/17-esperimenti/197-teongrav-team

Past Collaborations:

- **SPICA** mission: Galaxy evolution working group 2019
  Available at: http://spica-mission.org/
- **PRIN-SKA**: Empowering SKA as a probe of galaxy evolution with HI 2018
  Available at: http://cosmos.lambrate.inaf.it/eskape_wiki/ EskapeGroup

Memberships / Societies:

- **International Astronomical Union (IAU)**
  Division H: Interstellar Matter and Local Universe
  Division J: Galaxies and Cosmology
  Available at: https://www.iau.org/administration/membership/individual/19330/
- **INAF, Istituto Nazionale di Astrofisica, Associate**
  Osservatorio Astrofisico di Arcetri
- **INFN, Istituto Nazionale di Fisica Nucleare, Associate**
  Sezione di Roma

- **RDA: Research data alliance**
  Available at: https://www.rd-alliance.org/
- **EuroScience Members and Conferences Platform (ESCMP)**
  Available at: https://www.euroscience.org/

Teaching and Student supervision (7 Ph.D.; 5 M.Sc.)

PhD students:

- Co-supervison with R. Schneider and M. Ginolfi of **Claudia di Cesare**. 2020-present
  La Sapienza University, Roma.
  Project: PhD thesis - sub-project: Properties of dusty galaxies in $4 < z < 6$.
- Co-supervison with B. Ciardi of **Martin Glatzle**. 2016-2020
  MPA and TUM University Munich, Germany.
  Project: Radiative Transfer through dust in CRASH.
- Co-supervison with R. Schneider of **Michele Ginolfi**. 2015-2017
  La Sapienza University, Roma.
  Project: PhD thesis - sub-project: Properties of dusty,
  Local Group galaxies with GAMESH.
- Co-supervison with R. Schneider of **Matteo de Bennassuti**. 2015-2016
  La Sapienza University, Roma.
  Project: PhD thesis: Properties of Milky way progenitors with GAMESH.
- Co-supervison with R. Schneider of **Mattia Mancini**. 2014-2017
  La Sapienza University, Roma.
  Project: Properties of High redshift dusty Galaxies.
- Co-supervison with B. Ciardi of **Koki Kakiichi**. 2013-2016
  Astronomy LMU/IMPRS student.
  Project: Cosmological Reionisation probed by Lyman alpha line RT and quasars.
- Co-supervison with B. Ciardi of **Nitya Hariharan**. 2012-2015
  Informatics V — Scientific Computing at TUM/IMPRS student.
  Project: Numerical developments in CRASH. AMR, MPI parallelisation, integration with gas dynamics.

MsC students:

- Co-Supervison with R. Schneider and L. Pentericci of **Alessandra Venditti**. 2020-2021
  La Sapienza university of Rome, Italy.
  Project: M.Sc. Thesis: Pop III star formation across the Universe.
- Co-Supervison with Prof. R. Schneider of **Massimiliano Parente**. 2019-2020
  La Sapienza university of Rome, Italy.
  Project: M.Sc. Thesis: The spectral properties and observability of dusty galaxies in the Epoch of Reionization.

- Co-Supervison of **Alessandro Bonella**. 2019
  La Sapienza, University of Rome.
  Project: M.Sc. Thesis: Dust formation in the ejecta of supernovae.

- Supervison of **Martin Glatzle**. 2015-2016
  TUM University Munich, Germany.
  Project: M.Sc. Thesis: Radiative transfer through dust in CRASH.

- Supervison of **Nima Shahriari**. 2011-2011
  TUM University Munich, Germany. M.Sc. Internship at MPA.
  Project: Development of a VTK 3D Visualisation System for CRASH reionisation simulations.

Teaching:

- Laboratorio di Calcolo - Esercitazioni (Canale D-K, Prof. L. Soffi) 2020-2021
  La Sapienza university of Rome, Italy.

- "Simulazioni numeriche", a 4 hours complementary seminar of "Fisica Stellare" (Prof. R. Schneider) 2017
  La Sapienza university of Rome, Italy.

Awards, fellowships, funded projects

Astrophysics:

- **JWST Proposal. Cycle 1, ID. 1626:** 2021
  A Revolutionary Panchromatic View of Early Galaxy Growth via NIRSpec/IFU Observations of 12 Massive $z > 6.5$ Galaxies with ALMA-derived [CII] redshifts
  P.I. Mauro Stefanon (Rebels Collaboration) Available at:
  https://ui.adsabs.harvard.edu/abs/2021jwst.prop.1626S/abstract

- **Bandi ricerca / Sapienza University - Progetto: RP120172B85425FA - 4000 euros** 2020
  First stars and black holes
  P.I. R. Schneider

- **ESO Program 106.2184:** 2020
  How to make a Hot-DOG - Studying the mass assembly of the most luminous galaxies in the Universe with MUSE
  P.I. Michele Ginolfi Available at: http://archive.eso.org

- **Bandi ricerca / Sapienza University - Progetto: RP11916B658D933C - 4000 euros** 2019
  Early cosmic pollution in the first galaxies
  P.I. R. Schneider

- **ALMA High Priority Projects Cycle 4 Project (2016.1.00633.S):** 2016
  Revealing the nature of the high-redshift star-forming galaxy SDP.81 with the CO 3-2 line
  P.I. Matus Rybak Available at: https://almascience.eso.org/observing/highest-priority-projects

- **PRIN-SKA 2016:** "Empowering SKA as a probe of galaxy evolution with HI". 2016
  P.I. Leslie Hunt Available at: http://cosmos.lambrate.inaf.it/eskape_wiki/EskapeGroup

- **IMPRS Fellowship:** The International Max Planck Research School on Astrophysics. 2008
  Available at: https://www.imprs-astro.mpg.de/node/2984/index.html

Scientific computing and HPC:

- **PRACE Preparatory Access B.** 2016
  Awarded Project: Coupling the RT code CRASH4 with the AMR code RAMSES.
  Available at: http://www.prace-ri.eu/prace-preparatory-access-24th-cut-off-evaluation-march-2016
- **PRACE Preparatory Access B.** 2016
  Awarded Project: From the first stars to the first galaxies with dustyGadget on HPC.
  Available at: http://www.prace-ri.eu/prace-preparatory-access-24th-cut-off-evaluation-march-2016
- **PRACE Preparatory Access B.** 2014
  Awarded Project: High Performance release of the GAMESH pipeline.
  Available at: http://www.prace-ri.eu/preparatory-access-16/
- **PRACE Preparatory Access B.** 2014
  Awarded Project: Porting the Cosmological RT code CRASH to HPC.
  Available at: http://www.prace-ri.eu/preparatory-access-16/
- **ISCRA/CINECA Project.** 2014
  Awarded Project: GAMESH code development.
- **ISCRA/CINECA Project.** 2014
  Awarded Project: dustyGadget code development.
- **PRACE fellowship** for the Conference on Scientific Computing 2013 (CSC 2013). 2013
  Available at: http://cyprusconferences.org/csc2013/
- **DEISA Fellowship:** EU/US Summer School on HPC Challenges in Computational Sciences. 2010
  Available at: http://www.ihpcss.org/

Scientific Journal / Referee

- Topic editor, of Universe, MDPI

Referee/Service:

1. International Journal of Heat and Mass Transfer (Elsevier).
2. Numerical Heat and Mass Transfer (Taylor & Francis).
3. Mathematics, MDPI
4. Monthly Notices of the Royal Astronomical Society (Oxford University Press)
5. Universe, MDPI
6. Galaxies, MDPI
7. REPRISE referee
8. PRACE Projects Referee

The author certifies that every effort has been be made to ensure that the information provided above is accurate and up to date.

International Conferences (Invited:4/Contributed:23/Posters:10) Institute Seminars:9

Astrophysics:

1. MILLIMETRON: Submillimeter and Millimeter Astronomy: Objectives and Instruments, (ONLINE) 2021
   Contributed Talk.

2. Supernovae and Interstellar Dust, (ONLINE) 2021
   Invited Talk.

3. Sazerac conf.: CIDER.The Cold ISM During the Epoch of Reionisation , (ONLINE) 2021
   Contributed Talk.

4. Sazerac conf.: The 21-cm Signal from Cosmic Dawn and the Epoch of Reionisation, (ONLINE) 2021

5. The rise of dust and metals, Marseille 2020, France (ONLINE). 2020
   Contributed Talk.

6. Origin, growth and feedback of black holes in dwarf galaxies, San Sebastian, Spain (ONLINE). 2020

7. The Epoch of Galaxy Quenching, KAVLY, Cambridge, UK (ONLINE). 2020

8. ESO, Garching bei Muenchen, Germany. 2019
   ESO conference:Nine Billion Years of Neutral Gas Evolution invited with MIAPP Program.

9. Extremely Big Eyes on the Early Universe, Accademia dei Lincei, Roma, Italy. 2019
   Contributed Talk.

10. First structures First galaxies, Institut d´ Astrophysique de Paris, Paris, France. 2019
    Contributed Talk.

11. Fundamental Physics with LISA, Galileo Galilei Institute for Theoretical Physics, Firenze, Italy. 2018
    LISA Workshop series.

12. Gravity@Malta2018, Malta. 2018
    Poster Contribution: GAMESH and coalescence sites of GW-like events.
    doi:10.5281/zenodo.1495228

13. Rise and Shine 2018, Strasbourg, France. 2018
    Contributed Talk: Ionizing radiation from high redshift dusty galaxies.
    doi:10.5281/zenodo.1495224

14. Massive black holes in evolving galaxies, IAP Paris, France. 2018
    Poster Contribution: X-rays ionization and heating by high-z QSOs.
    doi:10.5281/zenodo.1495089

15. Francescos legacy: star formation in space and time, Firenze, Italy. 2017
    Poster Contribution: Star formation through cosmic space and time
    as traced by Milky Way progenitors .
    doi: 10.5281/zenodo.1495081

16. GEE5 Meeting: Galaxy Evolution and environment, Firenze, Italy. 2017
Invited/Section Review Talk: Star formation and
Galaxy evolution as traced through cosmic space and time.
doi: 10.5281/zenodo.1495172

17. Cosmic Reionisation, MIPP, Muenchen, Germany. 2016
Invited Talk: Radiative feedback with CRASH4 and its applications.
doi: 10.5281/zenodo.1495185

18. From wall to Web, Max Planck Society, MPG, Berlin, Germany. 2016
Contributed Talk: X-ray ionization of the intergalactic medium by quasars.

19. Molecules and dust as fuel to star formation, KITP, Santa Barbara (CA), USA. 2016
Poster Contribution: Cosmological galaxy formation simulations with dust.
doi:10.5281/zenodo.1495077

20. First stars V, Heidelberg, Germany. 2016
Contributed Talk: The role of feedback in regulating star formation through cosmic times.
doi: 10.5281/zenodo.1495133

21. VIALACTEA: The Milky Way as star formation engine, Roma, Italy. 2016
Contributed Talk: The formation of Milky Way under chemical and radiative feedback.

22. Convegno INAF: Frontiere dell'astrofisica italiana, Roma, Italy 2015

23. South by High redshift, University of Texas at Austin, USA. 2015
Contributed Talk: Dust formation and evolution with dustyGadget.
doi: 10.5281/zenodo.1494942
Poster Contribution: Dust in early galaxies.

24. First stars, galaxies, and black holes: Now and Then, Groningen, The Netherlands. 2015
Contributed Talk: Galaxy formation with chemical and radiative feedback.
doi:10.5281/zenodo.1494956

25. Advanced Workshop on Cosmological Structures from Reionization to Galaxies, 2015
ICTP,Trieste, Italy.
Contributed Talk: Galaxy formation with chemical and radiative feedback.

26. The metal enrichment of diffuse gas in the Universe. Sexten, Italy. 2015
Invited Talk: Radiative transfer through metals and dust.
doi:10.5281/zenodo.1494960

27. In the footsteps of galaxies 15, Soverato, Italy. 2015
Contributed Talk: Galaxy formation with chemical and radiative feedback.
doi:10.5281/zenodo.1495063

28. EWASS 2014: European Week of Astronomy and Space Science, Geneva, Switzerland. 2014

29. Intergalactic Interactions Workshop, The University of Edinburgh, Edinburgh, Scotland. 2013
Contributed Talk: Cosmic UV background fluctuations at z 3 as traced
by metal ions: radiative transfer effects.
doi:10.5281/zenodo.1494357

30. The Epoch of Reionization: Theory - Simulations - Observations, Strasbourg, France. 2012

31. Whereabouts, Physical State and Metallicity of the Missing Baryons in the Local Universe, Cervia, Italy. 2012
Contributed Talk: CRASH3: Cosmological radiative transfer through metals.

32. Planet Formation and Evolution 2012, Muenchen, Germany. 2012

33. New Horizons for High redshifts, Institute of Astronomy, University of Cambridge, UK. 2011
Poster Contribution: Cosmological radiative transfer through metals in CRASH.
doi:10.5281/zenodo.1494337

34. Young and Bright: Understanding High Redshift Structures, Potsdam, Germany. 2011

35. Cosmological Reionization HRI, Allahabad, India. 2010

36. The Chemical Enrichment of the Intergalactic Medium, Leiden, The Netherlands 2009

37. EPSC2008 European Planetary Science Congress 2008, Münster, Germany. 2008
Poster Contribution: Radiative transfer in protoplanetary disks.
doi:10.5281/zenodo.1494310

38. EANA 2007, 7th European Workshop on Astrobiology, University of Turku, Turku, Finland. 2007
Poster Contribution P10.5: Radiative Transfer in Protoplanetary Disk: vertical energy structure modeling and disk chemistry effects.
http://www.astro.utu.fi/conf/EANA07/programme.shtml
Poster Contribution P6.1: Thermal history of micrometeoroids during the atmospheric entry.

Working Group workshops:

1. **SKA** conference: A precursor view of the SKA Sky, (ONLINE) 2021

2. **THESEUS** CONFERENCE 2021, VIRTUAL, (ONLINE) 2021

3. **Rebels** Collaboration virtual meeting. 2020

4. **SPICA** Collaboration virtual meeting. 2020

5. **LISA** ASTRO-BLACK ITALY, Milano, Italy. 2019

6. 3rd **YAGN** meeting, CEFCA - Teruel, Spain. 2017
Contributed Talk: Feedback from QSOs in the high-z Universe.
doi:10.5281/zenodo.1495220

7. **CLUES** Meeting, Madrid, Spain. 2017
Contributed Talk: GAMESH and CLUES projects.
doi:10.5281/zenodo.1495193

8. **AGN meeting**, INAF, OAR, Roma, Italy. 2015
Contributed Talk: CRASH and GAMESH as tools to study Reionization.
doi:10.5281/zenodo.1494939

9. **DAVID** Workshop VII, Scuola Normale Superiore, Pisa, Italy. 2013
Contributed Talk: Multi-band Radiative transfer with CRASH4
doi:10.5281/zenodo.1494359

10. **DAVID** Workshop VI, Scuola Normale Superiore, Pisa, Italy. 2012

11. **Cosmological Radiative Transfer Comparison Project** Workshop IV, University of Texas, Austin, USA. 2012
Contributed Talk: CRASH3. Cosmological radiative transfer through metals.
doi: 10.5281/zenodo.1494347

12. **DAVID** Workshop VI, Scuola Normale Superiore, Pisa, Italy. 2011
Contributed Talk: MetalCRASH, radiative transfer through metals in CRASH.

13. **DAVID** Workshop IV, Florence, Italy. 2009
Contributed Talk: Special CRASH release and tutorials for Davidians.
doi:10.5281/zenodo.1494322

14. **Cosmological Radiative Transfer Comparison Project** Workshop III, University of Texas, Austin, USA. 2008

Institute seminars:

1. Amaldi Research Center, **La Sapienza University of Rome**, Roma, Italy. 2020
ARC Seminar: Models of galaxy formation cnstrained by GW.

2. **INAF-Osservatorio Astrofisico di Firenze**, Firenze, Italy. 2018
Institute Seminar: Models of galaxy formation with chemical and radiative feedback.
doi:10.5281/zenodo.1495124

3. **Scuola Normale Superiore**, Pisa, Italy. 2018
Institute Seminar: Galaxy formation and Radiative transfer.

4. **INAF-Astronomical Observatory of Rome**, Roma, Italy. 2014
Weekly Seminar: Cosmological radiative transfer through metals and Universe reionisation.
doi: 10.5281/zenodo.1494365

5. **The University of Melbourne**, School of Physics, Melbourne, Australia. 2013
Institute Seminar: Radiative transfer with CRASH.
doi:10.5281/zenodo.1494355

6. **Max Planck Institute for Astrophysics** MPA, Garching 2013
Institute Seminar: Cosmological radiative transfer through metals
and the UV background at the epoch of helium reionisation.

7. **University of Princeton**, Princeton, USA. 2012
Cosmology Seminar: Radiative transfer through metals with CRASH.

8. **Max Planck Institute for Astrophysics** MPA, Garching bei Munich, Fachbeirat / Advisory Committee. 2010
Invited Talk: Cosmological radiative transfer with CRASH.
doi: 10.5281/zenodo.1494332

9. **IMPRS** Selection Workshop, Garching bei Munich, Germany. 2008
Contributed Talk: Radiative transfer in protoplanetary disks.
doi:10.5281/zenodo.1494264

SOC/LOC:

1. **Quid ultra?** Frontiers and Controversies in Astrophysics, SOC, (La Sapienza University of Rome) 2021

2. **XV International conference on the origin of life**, LOC, University of Florence 2008

Scientific computing and HPC:

1. IBM Think 2021 Conference, (ONLINE) 2021
2. The EuroHPC Summit Week (EHPCSW) 2021, (ONLINE) 2021
3. NVIDIA HPC Summit Digital (ONLINE). 2020
4. INAF ICT workshop, Cefalú, Italy. 2015
   Contributed Talk: ERC FIRST HPC-class Projects at INAFOAR.
5. PRACE Scientific and Industrial Conference 2014, Barcelona, Spain. 2014
6. Workshop on exascale and PRACE prototypes, Barcelona, Spain. 2014
7. Conference on Scientific Computing CSC2013, The Cyprus Institute, Paphos, Cyprus. 2013
   Poster Contribution: Parallel, multi-frequency-band cosmological radiative transfer with CRASH4 and its applications.
8. Introduction to large scale program development and debugging on SuperMUC with DDT. Leibniz-Rechenzentrum. Garching bei Muenchen, Germany. 2012
9. 5th VI-HPS Tuning Workshop TUM/LRZ/MPG in Garching, Mnchen, Germany. 2010