## **CURRICULUM VITAE**

Last update: 20/10/2024



#### ALDO STEFANO BONOMO

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Nationality: Italian

Date of birth: 20 December 1980

### **Education**

03/2009: PhD in Physics, summa cum laude, Università degli Studi di Catania. Thesis title: "Detection of Earth-like planetary transits in the presence of stellar microvariability", supervisors: Dr. Antonino F. Lanza and Prof. Alessandro C. Lanzafame.

07/2005: Master's Degree in Physics, summa cum laude, Università degli Studi di Catania. Thesis title: "Cyclic variability of the Sun as a star: analysis of the Total Irradiance as measured from satellites", supervisors: Dr. Antonino F. Lanza and Prof. Marcello Rodonò.

07/1999: High School Diploma, "Liceo Classico M. Cutelli", Catania, with full marks

## > Experience

01/2024- : INAF (Istituto Nazionale di AstroFisica) senior researcher at the Osservatorio Astrofisico di Torino (OATo)

12/2016-12/2023: INAF staff researcher at OATo

02/2014-11/2016: FP7-SPACE ETAEARTH post-doc position at INAF-OATo to work on the characterization of small-size planetary systems with the *Kepler* space telescope and the HARPS-N (High Accuracy Radial velocity Planet Searcher for the Northern hemisphere) spectrograph mounted on the Italian 3.6 m Telescopio Nazionale Galileo (TNG) in La Palma island

02/2012-01/2014: INAF post-doc position at OATo for the planning, performance, and analysis of HARPS-N@TNG observations to search for low-mass planets and to characterize *Kepler* small-size planetary candidates, within the HARPS-N/GTO (Guaranteed Time Observations) and INAF/GAPS (Global Architecture of Planetary Systems) consortia

01/2011-12/2011: CNES (Centre National d'Études Spatiales) postdoctoral fellowship at the Laboratoire d'Astrophysique de Marseille (LAM, France) to work on the data obtained by the CoRoT (Convection Rotation and planetary Transits) space telescope for the search for and characterization of CoRoT and Kepler planetary systems, and for the study of the magnetic activity of planet-hosting stars

04/2009-12/2010: CNRS (Centre National de la Recherche Scientifique) post-doc position at LAM as scientist responsible for the CoRoT Alarm Mode aimed at the early detection of planetary transits in the CoRoT N1-level data

10/2008-03/2009: CNRS post-doc position at LAM to work on the analysis of CoRoT data

06/2007-01/2008: Visiting the Institut d'Astrophysique Spatiale (Université Paris-Sud XI, Paris-Orsay, France) to work on transit detection techniques for the analysis of CoRoT data

10/2005-11/2005: graduate student grant at INAF – Osservatorio Astrofisico di Catania for the development of models of the Total Solar Irradiance variations and their application to solar-type stars

## ➤ Main fields of research/interest:

- Detection and characterization of exoplanetary systems
- Planet occurrence rates
- Exoplanetary atmospheres
- Magnetic activity of late-type stars
- Star-planet interactions

#### > Scientific contribution

- > 190 refereed journal papers with > 9000 citations; > 25 non-refereed publications (conference proceedings); ORCID: https://orcid.org/0000-0002-6177-198X
- h-index=50; m-index=2.8; g-index=86 (source: SAO/NASA ADS)
- -> 50 talks at national or international conferences/workshops, scientific institutes and universities

# > Specific scientific responsibilities/tasks and memberships

- Chair of the GAPS Board (01/2024-12/2024)
- Member of the GAPS Board (11/2023-)
- Member of the International Astronomical Union (IAU) (06/2022-)
- Member of the Ariel (Atmospheric Remote-sensing Infrared Exoplanet Large-survey) space mission team (2021-)
- Co-leader of the HARPS-N Collaboration sub-program on the RV long-term monitoring of *Kepler*, K2, and TESS systems (2024- ) (other co-leader: Dr. L. Naponiello)
- Leader of the HARPS-N/GTO (Guaranteed Time Observations) sub-program on the RV long-term monitoring of *Kepler* and K2 systems (2019-2023)
- GAPS (Global Architecture of Planetary Systems) Atmospheres Project Scientist (10/2017-)
- Member of the GAPS Science Team (10/2017-)
- Member of the HARPS-N/GTO Target Selection Team to plan the radial-velocity follow up of *Kepler/K2* and *TESS* planetary candidates with HARPS-N (2015-)
- Member of the HARPS-N/GTO Consortium (2012- )
- Member of the GAPS consortium with top-level and second-level Work Package responsibilities (2012- )

- Member of the PLATO (PLAnetarty Transits and Oscillations of stars) space mission team (2010-)
- Member of the CoRoT (Convection Rotation and planetary Transits) Science Team (2010-2012)
- Scientist in charge of the Alarm Mode of the CoRoT space mission for the early detection of planetary transits in CoRoT N1-level data (2009-2010)

### > Professional service

## Referee activity:

- Referee for the peer-reviewed journals Astronomy and Astrophysics, Monthly Notices of the Royal Astronomical Society, The Astronomical Journal, Icarus
- Panel Member of the ESO (European Southern Observatory) Observing Programs Committee (2019)
- External reviewer of OPTICON proposals (2018-)
- External reviewer of individual applications for the following grants: Swiss National Science Foundation (SNSF) grant; Royal Astronomical Society (RAS) Research Fellowship; PhD position at the Università Italo-Francese

#### Participation to boards/panels:

- President of a board of examiners for a fixed-term position (Contratto a Tempo Determinato) at INAF-OATo (01-02/2024)
- President of two boards of examiners for post-doc positions (Assegni di Ricerca) at INAF-OATo (01-02/2024)
- Member of boards of examiners for post-doc positions at INAF-OATo (12/2018, 05/2020, 10/2020)
- Member of a board of examiners for a scholarship at INAF-OATo (04/2024)
- Member of the board to assign a PhD position at INAF-OATo (2023)
- Member of the board for the drafting of the HARPS-N Collaboration 2023-2028 White Paper (2023)

### Organization of conferences, workshops, seminars:

- Member of the Scientific Organizing Committee of the Meeting "Exoplanets in Italy: status and perspectives" (Roma, 26-28/02/2025)
- Co-organizer of the sessions on atmospheric characterization at high resolution at about ten GAPS Progress Meetings (2017-)
- Member of the Scientific Organizing Committee of the EPRV (Extreme Precision Radial Velocity) IV Meeting (Grindelwald, 17-21/03/2019)
- Responsible for the organization of the AGRET (Astrometry, Galaxy, Relativity, Exo-planets and related Technology) internal meetings at INAF-OATo (09/2021-12/2022)
- Responsible for the organization of seminars at INAF-OATo (01/2017-12/2018)

#### > Awards

- CNES (Centre National d'Études Spatiales) postdoctoral fellowship on the topic "Detection and characterization of CoRoT transiting planets Magnetic activity of planet-hosting stars" at the Laboratoire d'Astrophysique de Marseille (2011)
- Prize "Accueil de Chercheurs" (3 k€) by the City of Marseille on 5 November 2009 for the quality of scientific work pursued as a foreign researcher in Marseille

## > Awarded grants

- INAF Large Grant 2023 "EXODEMO: The Demographics of Planetary Systems with Solar System-Type Architectures", Responsible of Work Package (WP) 4 (PI: Dr. A. Sozzetti), 200 k€
- INAF GO (Guest Observer) Large Grant 2023 "Global Architecture of Planetary System (GAPS) 2", Co-Investigator (PI: Dr. G. Micela), 100 k€
- PRIN (Progetto di Ricerca di Interesse Nazionale) MUR (Ministero dell'Università e della Ricerca) 2022 "ESPLORA: Exoplanet Spectroscopy at high resolution to Probe their Lost Origins by Revealing their Atmospheric compositions", Principal Investigator, 187 k€
- PNRR (Piano Nazionale di Ripresa e Resilienza Recovery and Resilience Plan) 2022-2025 grant for the project "Development and optimization of high-performance tools for the modeling of exoplanetary atmospheres" within the Italian National Center for High-Performance-Computing (Spoke 3), Principal Investigator, 152 k€
- PRIN INAF 2019 "The HOT-ATMOS Project: characterizing the atmospheres of hot giant planets as a key to understand the exoplanet diversity", Principal Investigator, 154 k€
- ASI (Agenzia Spaziale Italiana) INAF grant 2018 "Time-dependent high-energy stellar radiation and planetary atmosphere interaction" (THEStellarPAth), Responsible of WP3 (PI: Dr. A. Maggio), 167 k€
- INAF PhD grant at Università di Torino, 2017-2020, on "Structural and Atmospheric Characterization of Transiting Planetary Systems", Co-PI (other co-PI: Dr. A. Sozzetti), 28 k€

## > Selected observing proposals

- Co-I of the Large Programs with HARPS-N and/or GIANO at TNG "Accurate masses of transiting small planets and their hidden friends" (21 nights per semester), "The Great HARPS-N hunt for super-Earths and Neptunes interior to outer giant planets detected by Gaia" (13 nights per semester), "Pushing HARPS-N towards detecting temperate terrestrial-mass planets and habitable-zone Super-Earths" (11 nights per semester), "The magnifying glass of HARPS-N & Ariel on the nature of the exoplanets in the Radius Valley" (10 nights per semester), "BRIDGES: Building a Road to the In-Depth investiGation of Exoplanetary atmospheres" (9 nights per semester), 2023-2028
- Co-I of the Long-Term Proposal "The PEPSI/LBT Exoplanet Transit Survey (PEPSI)", 30 nights with PEPSI@LBT, 2021
- Co-writer/Co-I of the Long-Term Proposal "GAPS2: the origin of planetary system diversity", 68 nights/yr with GIARPS@TNG, 2018-2023
- PI of the Proposal "A search for low-mass planets in the habitable zone of a nearby and quiet M dwarf", 2 nights with HARPS-N@TNG, 2018
- PI of the Proposal "Probing the atmosphere of the hot Jupiter HD102195b with Giano", 2 nights with GIANO@TNG, 2016
- PI of the Proposal "A Giano view of the dayside of tau Bootis b", 2 nights with GIANO@TNG, 2016
- Co-I of the ESO Proposal "A HARPS Hunt for Scaled-Down Solar-System Analogs", 9 nights with HARPS@ESO, 2014
- Co-writer/Co-I of the Proposals "Characterizing the Global Architecture of Planetary Systems with HARPS-N", ~65 nights/yr with HARPS-N@TNG, 2012-2017
- Co-I of the Proposals "Characterization of transiting planets with SOPHIE@OHP", ~30 nights/yr with SOPHIE@OHP, 2012-2015

# > Supervision and teaching

#### Supervision:

<u>02/2024-</u>: Post-doc position (Assegno di Ricerca) supervisor (Dr. L. Naponiello)

<u>05/2023-</u>: Fixed-Term position (Tempo Determinato) supervisor (Dr. G. Guilluy)

11/2020-04/2023: Post-doc position supervisor (Dr. G. Guilluy)

<u>11/2020-10/2023</u>: PhD in Astrophysics at Università di Roma Tor Vergata (XXXVI cycle) cosupervisor (L. Naponiello)

<u>11/2013-</u>: Master's Theses main supervisor (S. Crespi, R. Bongiolatti, R. Stognone, A. Massa, E. Pezzetta) and co-supervisor (S. Bruna)

<u>11/2013-</u>: Bachelor's Theses main supervisor (M.C. Maimone, N. Cibrario, S. Bruna, R. Stognone, A. Massa) and co-supervisor (E. Pezzetta)

#### Teaching:

<u>02/2022-</u>: National qualification for teaching as Associate Professor at Italian Universities (academic recruitment field 02/C1: Astronomy, Astrophysics, Physics of Earth and planets)

<u>16-20/09/2024</u>: Lecturer at the EXOHOST Summer School on the topic "Planet Formation and populations", Tartu (Estonia)

<u>22-26/05/2023</u>: Lecturer at the 4<sup>th</sup> Advanced School on Exoplanetary Science (ASES) on the topic "Astrophysics of Transiting Exoplanets", Vietri sul Mare (Italy)

 $\underline{02/2020-03/2023}$ : Training courses on exoplanets for high-school teachers organized by INAF-OATo

<u>02/2022-03/2022</u>: Training course on exoplanets for high-school teachers organized by the Accademia delle Scienze di Torino

<u>10/2010-11/2010</u>: Tutoring of general Mathematics to undergraduate students of the Classes Préparatoires Polytech Marseille (France)

<u>04/2006-05/2007</u>: Private tutoring of general Mathematics courses to undergraduate students of the Università di Catania at the Camplus D'Aragona residence

# > Selected interviews, press releases and articles related to my publications:

<u>30/08/2023</u>: The densest Neptune-size planet ever observed ("Il nettuniano più denso mai osservato"), https://www.media.inaf.it/2023/08/30/nettuniano-denso/

<u>06/07/2023</u>: interview with mediainaf about the hunt for cold Jupiters in transiting small planet systems with HARPS-N ("A caccia di giganti freddi con HARPS-N",

https://www.media.inaf.it/2023/07/06/a-caccia-di-giganti-freddi-con-harps-n/)

<u>03/02/2023</u>: interview on Rai-2/TG-2 about the discovery of the exoplanet Wolf-1069b in the habitable zone around an M-mid dwarf

<u>24/10/2022</u>: Soup of molecules for two warm exoplanets ("Insalata di molecole per due tiepidi esopianeti"), https://www.media.inaf.it/2022/10/24/cinque-molecole-carleo-guilluy/

<u>08/07/2022</u>: I sistemi planetari intorno alle nane rosse ("Planetary systems around red dwarfs"), https://www.media.inaf.it/2022/07/08/sistemi-planetari-delle-nane-rosse/

<u>11/2021:</u> interview together with Dr. L. Spina about exoplanet-eating stars ("Caccia alle stelle cannibali") on BBC Science Italy magazine

7/04/2021: A migrating exoplanet as revealed by its atmosphere ("Esopianeta migrato, lo rivela la sua atmosfera"), https://www.media.inaf.it/2021/04/07/esopianeta-migrato-hd209458b/

9/06/2020: Helium in the atmosphere of HD189733b ("Elio bollente nell'atmosfera di

HD189733b"), https://www.media.inaf.it/2020/06/09/elio-bollente-nellatmosfera-di-hd-189733b/

<u>27/09/2019</u>: Heavy air on an exoplanet? HARPS-N can tell you ("Aria pesante sull'esopianeta? Te lo dice HARPS-N", https://www.media.inaf.it/2019/09/27/harps-kelt-9b/,

http://www.tng.iac.es/news/2019/09/29/arm/)

27/06/2019: Water worlds galore, https://www.nature.com/articles/s41550-019-0846-4

23/04/2019: Methane on an hot Jupiter ("C'è metano su quel gioviano",

https://www.media.inaf.it/2019/04/23/ce-metano-su-quel-gioviano/,

http://www.tng.iac.es/news/2019/04/22/jupiter methane/)

4/02/2019: Different twin super-Earths ("Ecco le due super-terre gemelle ma diverse",

https://www.media.inaf.it/2019/02/04/kepler-107-superterre-gemelle/;

http://www.ansa.it/canale\_scienza\_tecnica/notizie/spazio\_astronomia/2019/02/07/da-una-

 $cata strofe-cosmica-due-pianeti-gemelli-diversi-\_115f0ba7-1e76-4b1a-9a62-887016c960db.html;$ 

http://www.tng.iac.es/news/2019/02/04/giant-impact/)

11/12/2018: the identity card of Kepler-1657b ("La carta d'identità di Kepler-1657b"

https://www.media.inaf.it/2018/12/11/kepler-1657b-aldo-bonomo/)

<u>18/08/2018</u>: "More water than expected on extrasolar planets" ("Acqua più abbondante del previsto nei pianeti extrasolari")

http://www.ansa.it/canale\_scienza\_tecnica/notizie/spazio\_astronomia/2018/08/18/acqua-piu-abbondante-del-previsto-nei-pianeti-extrasolari cef5fa51-181b-41d1-a356-672779a6f6ce.html

02/04/2018: interview on Rai-1 about the Earth-size planet with a Mercury-like composition K2-

229b, http://gallery.media.inaf.it/main.php/v/video/inafintv/Rai1/20180402 unomattina.mp4.html

26/03/2018: A super-Earth with a super nucleus ("Una super-Terra con un super nucleo",

https://www.media.inaf.it/2018/03/26/una-super-terra-con-un-super-nucleo/)

19/03/2018: A habitable planet hides as its star has a tantrum ("La stella fa le bizze e il pianeta si nasconde", https://www.media.inaf.it/2018/03/19/kepler-2-3/;

http://www.tng.iac.es/news/2018/03/21/k2/)

<u>19/01/2018</u>: The ultra short-period super-Earth K2-141b ("K2-141b: la Super-Terra dall'orbita ultra-breve", http://www.media.inaf.it/2018/01/19/k2-141b-orbita-ultra-breve-e-temperature-infernali/; http://www.tng.iac.es/news/2018/01/29/k2-141/)

7/04/2017: The violent migration of hot giants ("La migrazione violenta dei giganti caldi",

http://www.media.inaf.it/2017/04/07/la-migrazione-violenta-dei-giganti-caldi/)

<u>3/12/2015</u>: interview with mediainaf about false positives among the Kepler giant planetary candidates ("Credevo fosse un Giove e invece era una stella",

http://www.media.inaf.it/2015/12/03/kepler-falsi-positivi/,

http://gallery.media.inaf.it/main.php/v/voci/interviste/20151203-aldo-bonomo.mp3.html)

<u>27/01/2015</u>: "Ah oui, je suis TrES léger!" (http://www.media.inaf.it/2015/01/27/oh-oui-je-suis-tres-leger/; http://www.tng.iac.es/news/2015/02/03/exo-planet/)

17/09/2014: An inverted planetary system ("Un sistema planetario invertito",

http://www.media.inaf.it/2014/09/17/un-sistema-planetario-invertito/

http://www.tng.iac.es/news/2014/09/17/kepler101/)

<u>2/07/2014</u>: Different Twins ("Gemelli diversi", http://www.media.inaf.it/2014/07/02/gemelli-diversi/;

http://www.tng.iac.es/news/2014/07/03/two-planets/)

2/06/2014: A megaEarth found by HARPS-N ("Una megaterra per HARPS-N",

http://www.media.inaf.it/2014/06/02/una-megaterra-per-harps-n/;

http://www.tng.iac.es/news/2014/06/02/harps-megaearth/)

<u>14/06/2010</u>: Rich exoplanet harvest for CoRoT (http://cnes.fr/fr/web/CNES-fr/8576-gp-7-nouvelles-planetes-decouvertes-par-corot.php)

<u>14/06/2010</u>: interview together with prof. M. Deleuil and Dr. A. Santerne on France-3 about the discovery of seven CoRoT exoplanets

- > Talks at international or national meetings, conferences and workshops:
- 16-21/06/2024: "EXOPLANETS V", Leiden, Netherlands. Title: *Understanding the formation of small planets by searching for their cold giant siblings*.
- 14-16/05/2024: "ESP2024: PLATO Planetary Systems formation to observed architectures", Catania, Italy. Title: *Understanding the formation of small planets by searching for their cold giant siblings. The fundamental role of PLATO*
- 17-18/01/2024: "GaiaNIR: next astrometric mission", Bologna, Italy. Title: Characterization and occurrence rate of Jupiter and Saturn analogs to assess their impact on the formation of small and terrestrial inner planets. The crucial role of Gaia-NIR, Invited talk
- 25-27/09/2023: "PLATO Science in Italy: ready to data exploitation?", Catania, Italy. Title: Frequency of Jupiter analogs in small planet systems to understand the formation of short-period super-Earths/sub-Neptunes and our Solar System. The fundamental role of PLATO, Invited talk
- 06-10/02/2023: "Congresso Nazionale di Scienze Planetarie" (national congress of planetary science), Perugia, Italy. Title: Search for and occurrence rate of Jupiter analogs in planetary systems with short-period sub-Neptunes
- 22-24/07/2021: "Mathematics for Non-stationary Signals and Applications in Geophysics and Other Fields", L'Aquila, Italy. Title: *Treatment of non-stationary noise signals for the detection and characterization of extrasolar planets*
- 21-23/10/2019: "Congresso Nazionale di Astrochimica e Astrobiologia (proto-)planetarie" (national congress of proto-planetary and planetary astrochemistry and astrobiology), Trieste, Italy. Title: *The composition of small planets with HARPS-N@TNG*
- 9/02/2018: "5 years of HARPS-N Science Workshop", La Palma Island, Spain. Title: *Investigating giant planet migration history with HARPS-N eccentricity and obliquity measures*, Invited talk
- 12-15/09/2017: "Nuovi Attori per Nuovi Scenari dell'Astrofisica" (new actors for new scenarios of astrophysics), LXI Congresso Nazionale della Società Astronomica Italiana, Padova, Italy. Title: *La straordinaria diversità delle architetture dei sistemi planetari* (the extraordinary diversity of exoplanetary system architectures), Invited talk
- 16-21/07/2017: "Transiting Exoplanets", Keele, UK. Title 1<sup>st</sup> talk: *Characterization of the K2-3 planetary system with 300 HARPS and HARPS-N radial velocities*. Title 2<sup>nd</sup> talk: *A Giano view of the atmosphere of the transiting hot Jupiter HD189733b*
- 1-3/03/2017: "La missione e le prospettive scientifiche del TNG nell'astrofisica del 2020", (the mission and scientific perspectives of the TNG for the astrophysics in 2020), Padova, Italy. Title: *GAPS-2 The Origins: a new frontier with GIARPS*
- 21-23/06/2016: "4th CHEOPS Science Workshop", Geneva, Switzerland. Title: CHEOPS and the search for habitable planets

5-9/10/2015: "Twenty years of giant exoplanets", Observatoire de Haute Provence, France Title: Structure and evolution of transiting giant planets: a Bayesian homogeneous determination of orbital and physical parameters

29/06 - 03/07/2015: "From Super-Earths to Brown Dwarfs: who's who?", Paris, France Title: Structure and evolution of transiting giant planets: a Bayesian homogeneous determination of orbital and physical parameters

5-7/11/2014: "La ricerca dei pianeti extrasolari in Italia" (the search for exoplanets in Italy), Roma, Italy. Title: *Results from CoRoT and Kepler*, Invited talk

5-7/11/2012: "GREAT-ESF Workshop. Gaia and exoplanets: great synergies on the horizon", Turin, Italy. Title: *The impact of Gaia on the planet occurrence rates as derived from the space-based transit surveys Kepler and CoRoT* 

19-21/10/2011: Atelier "Magnétisme stellaire et Planètes extrasolaires" (stellar magnetic activity and extrasolar planets), Observatoire de Haute Provence, France. Title: *L'activité et les mesures de transit* (stellar activity and transit observations)

14-17/06/2011: "Second CoRoT international Symposium", Marseille, France. Title: *Frequency of small planets in the CoRoT fields of view* 

16-18/09/2009: "Unsinkable Planets: telluric planet detection and stellar activity", Exeter, UK. Title: *Detection of planetary transits in the presence of stellar microvariability* 

## > Oral contributions at the following restricted meetings:

17-19/04/2024: 20th GAPS Progress Meeting, Padova, Italy

8-10/11/2023: 19th GAPS Progress Meeting, Torino, Italy

15-17/06/2021: HARPS-N GTO Science Meeting, online

9-11/12/2020: 17th GAPS Progress Meeting, online

4-6/05/2020: 16<sup>th</sup> GAPS Progress Meeting, online

4-6/12/2019: 15th GAPS Progress Meeting, Catania, Italy

8-10/05/2019: 14th GAPS Progress Meeting, Trieste, Italy

28-30/11/2018: 13th GAPS Progress Meeting, Napoli, Italy

14-16/05/2018: 12th GAPS Progress Meeting, Cagliari, Italy

8-10/11/2017: 11th GAPS Progress Meeting, Milano, Italy

15-17/05/2017: 10<sup>th</sup> GAPS Progress Meeting, Palermo, Italy

15/02/2017: 3<sup>rd</sup> ETAEARTH Progress Meeting, Bruxelles, Belgium

17-18/01/2017: GAPS Meeting on Atmospheres and Young Planets, Rome, Italy

24-26/10/2016: 9th GAPS Progress Meeting, Aosta, Italy

15-16/06/2016: Meeting INAF-Macroarea 2: Stelle, popolazioni stellari e mezzo interstellare, Bologna, Italy

6-8/04/2016: 8th GAPS Progress Meeting, Padova, Italy

15/02/2016: 2<sup>nd</sup> ETAEARTH Progress Meeting, Bruxelles, Belgium

4-7/11/2015: 7th GAPS Progress Meeting, Catania, Italy

22-24/04/2015: 6<sup>th</sup> GAPS Progress Meeting, Trieste, Italy

2/12/2014: PLATO 2.0 Transit Detection Workshop, Catania, Italy

22-24/10/2014: 5th GAPS Progress Meeting, Naples, Italy

29-30/04/2014: 4th GAPS Progress Meeting, Milan, Italy

24-25/10/2013: 3rd GAPS Progress Meeting, Palermo, Italy

26-27/02/2013: Joint meeting of the ETAEARTH Consortium and HARPS-N/GTO Science Team, Rome, Italy

4-5/02/2010: CoRoT CEST Meeting, Paris, France

1-2/02/2010: CoRoT Transit Modelling Meeting, Berlin, Germany

4-5/11/2009: CoRoT CEST Meeting, Paris, France

8-9/06/2009: CoRoT CEST Meeting, Paris, France

## > Public outreach

- Lectures and/or laboratories on exoplanets for high-school students at high-secondary schools in Torino (licei scientifici Majorana, Avogadro, Curie-Vittorini, Sant'Anna, Istituto Sociale, primo liceo artistico statale), Ventimiglia (liceo scientifico Aprosio), Savignano (liceo scientifico Marie Curie), Catania (istituto istruzione superiore Vaccarini), and at OATo, since 2013
- Lectures and laboratories on exoplanets within the MasterClass of Astronomy and Astrophysics for high-school students at the Università di Torino, also valid as school-work alternation, since 2016
- 6-hr courses on exoplanets for high-school students organized by the Scuola di Formazione Scientifica Luigi Lagrange at the Open011 Hostel Turin, also valid as school-work alternation (29/10/2022, 12/11/2022, 10/11/2023, 9/11/2024)
- Development of laboratories on exoplanets for high-school students, in collaboration with the Planetarium InfiniTo (see https://ricerca.repubblica.it/repubblica/archivio/repubblica/2018/04/11/e-allalba-si-punta-il-telescopio-sul-sole55.html?ref=search), since 2017
- Cycle of meetings, together with Dr. G. Puglisi, on "Il più grande spettacolo dopo il Big Bang" ("The greatest show after the Big Bang") for the university students of the CAMPLUS colleges, online meetings (April-May, 2020)
- Public lecture "I pianeti extrasolari. Altre terre nell'Universo? ("The extrasolar planets. Other earths in the Universe?") at the Abbazia di Mirasole (Milano) on 19/10/2019
- Lecture "Dalla Terra alla Luna: 50 anni dallo sbarco" ("From the Earth to the Moon: 50 years since the Moon landing") for the high-school students of the liceo scientifico Sant'Anna (Torino, 29/03/2019)
- Contribution to the realization of the exhibition "Exoplanets: nuove terre inesplorate, l'antico mistero della vita" ("Exoplanets: new unexplored Earths, the old mystery of life") in collaboration with the Euresis Association, since August 2018 (see https://euresis.org/mostre/2018-exoplanets/); related conference in Torino (Piazza dei Mestieri on 17/09/2020)
- Public lectures at the Planetarium InfiniTo (Pino Torinese):

"Esopianeti ed esobiologia" ("Exoplanets and exobiology"); lecture along with Dr. M. Damasso, Prof. D. Gandolfi, and Dr. A. Sozzetti, aimed at the students of the Università di Torino, 03/03/2023

"La storia del telescopio spaziale Kepler, il più grande cacciatore di esopianeti" ("The history of the Kepler telescope, the greatest exoplanet hunter"), 18/11/2018;

"Esopianeti, alla ricerca di un'altra Terra" ("Exoplanets, discovering an Earth twin"), 17/10/2016

- Participation in the "Astronomy Variety Show" at the Planetarium InfiniTo, 7/10/2017
- Participation in some events of "The night of researchers", Torino, since 2013
- Lectures and guided tours of the solar telescope for high-school students at the INAF Osservatorio Astrofisico di Catania (Catania, 2006-2007)

## > Skills

- Scientific programming: IDL, Fortran, C; experience in High Performance Computing on grid infrastructures
- Observing (> 100 nights) with high-resolution spectrographs such as HARPS-N/GIANO-B@TNG (Observatorio del Roque de Los Muchachos, La Palma, Canary Islands), SOPHIE@OHP (Observatoire de Haute Provence, Saint-Michel l'Observatoire, France) and HARPS@ESO (European Southern Observatory, La Silla, Chile)
- Languages: Italian (mother language), English (advanced), French (upper intermediate)