Christian Magliano ⓘD .

✉ chrismagliano.cm@gmail.com   in Christian Magliano   ⬡ ChrisMagliano
🌐 WebPage

Publications and activities: Google Scholar, Astrophysics Data System

ACADEMIC INTERESTS

Astrophysics; Exoplanets; Data Science; Data Analysis; Data Engineering; Statistics.

EDUCATION

Jun 2016	**General certificate of Secondary Education** $100/100L$**, Cava de' Tirreni, Italy** .
Sept 2016 – Sept 2019	**BSc in Physics,** $110/110L$**, University of Salerno, Italy**. Thesis: *SUSY in QM: calculating bound states without calculations.*
Sept 2019 – Sept 2021	**MSc in Physics,** $110/110L$**, University of Salerno, Italy**. Thesis: *Inflationary cosmology.*
Jan 2022 –	**PhD in Astrophysics, University of Naples, Italy**. Thesis: *Preparing for the scientific exploitation of the PLATO mission.*

PROFESSIONAL EXPERIENCE

Jun 2021 - July 2021	**Data Analysis of the DarkSide-50 experiment**, University of Salerno, Italy.
Feb 2022	**Visitor Observer at Copernico Telescope within the Comet Interceptor mission (ESA)**, Asiago, Italy.
Jan 2023 – April 2023	**Performance tests of PLATO's optical units**, LEONARDO S.p.A., Campi Bisenzio, Italy.
Feb 2024 – April 2024	**Data Analysis of PLATO's optical perfomances obtained in LEONARDO S.p.A.**, LEONARDO S.p.A., Campi Bisenzio, Italy.

PUBLICATIONS

Bibliography

1. K. Barkaoui, R. P. Schwarz, N. Narita, *et al.*, "Three short-period Earth-sized planets around M dwarfs discovered by TESS: TOI-5720 b, TOI-6008 b, and TOI-6086 b,", vol. 687, A264, A264, Jul. 2024. 🔗 DOI: 10.1051/0004-6361/202349127. arXiv: 2405.06350 [astro-ph.EP].

2. B. K. Capistrant, M. Soares-Furtado, A. Vanderburg, *et al.*, "TESS Hunt for Young and Maturing Exoplanets (THYME). XI. An Earth-sized Planet Orbiting a Nearby, Solar-like Host in the 400 Myr Ursa Major Moving Group,", vol. 167, no. 2, 54, p. 54, Feb. 2024. 🔗 DOI: 10.3847/1538-3881/ad1039. arXiv: 2401.04785 [astro-ph.EP].

3. C. Magliano, G. Covone, V. Nascimbeni, *et al.*, "PLATO on the shoulders of TESS: analysing mono-transit planet candidates in TESS data as a prior knowledge for PLATO observations,", vol. 528, no. 2, pp. 2851–2870, Feb. 2024. 🔗 DOI: 10.1093/mnras/stae210. arXiv: 2401.10072 [astro-ph.EP].

4. H. Rauer, C. Aerts, J. Cabrera, *et al.*, "The PLATO Mission," *arXiv e-prints*, arXiv:2406.05447, arXiv:2406.05447, Jun. 2024. 🔗 DOI: 10.48550/arXiv.2406.05447. arXiv: 2406.05447 [astro-ph.IM].

5. C. Magliano, G. Covone, R. Dobal, *et al.*, "A systematic validation of hot Neptunes in TESS data,", vol. 519, no. 1, pp. 1562–1577, Feb. 2023. 🔗 DOI: 10.1093/mnras/stac3404. arXiv: 2211.08490 [astro-ph.EP].

6 C. Magliano, V. Kostov, L. Cacciapuoti, *et al.*, "The TESS Triple-9 Catalog II: a new set of 999 uniformly vetted exoplanet candidates,", vol. 521, no. 3, pp. 3749–3764, May 2023. 🔗 DOI: 10.1093/mnras/stad683. arXiv: 2303.00624 [astro-ph.EP].

7 L. Tonietti, B. Barosa, E. Pioltelli, *et al.*, "Exploring the Development of Astrobiology Scientific Research through Bibliometric Network Analysis: A Focus on Biomining and Bioleaching," *Minerals*, vol. 13, no. 6, p. 797, Jun. 2023. 🔗 DOI: 10.3390/min13060797.

8 L. Cacciapuoti, L. Inno, G. Covone, *et al.*, "TESS discovery of a super-Earth and two sub-Neptunes orbiting the bright, nearby, Sun-like star HD 22946,", vol. 668, A85, A85, Dec. 2022. 🔗 DOI: 10.1051/0004-6361/202243565. arXiv: 2209.09597 [astro-ph.EP].

CONFERENCE PROCEEDINGS

1 S. Fiscale, L. Inno, A. Rotundi, *et al.*, "DART-Vetter: A Deep LeARning Tool for automatic vetting of candidates detected in transiting surveys," in *EAS2024*, Jul. 2024, 2053, p. 2053.

2 E. Mazzotta Epifani, I. Bertini, S. Fiscale, *et al.*, "The Dust Environment of Distant Long Period Comets: A Study in Support to ESA Comet Interceptor Space Mission," in *Asteroids, Comets, Meteors Conference*, ser. LPI Contributions, vol. 2851, Aug. 2023, 2380, p. 2380.

3 C. Magliano, G. Covone, R. M. Ienco, *et al.*, "The efficiency of the oxygenic photosynthesis on Earth-like planets in the habitable zone," in *44th COSPAR Scientific Assembly. Held 16-24 July*, vol. 44, Jul. 2022, p. 582.

Talks

Dec 12, 2023	🔖 Exoplanets in Naples, First ExoplaNAts annual meeting. Naples, Italy.
Sept 25-27, 2023	🔖 PLATO Science in Italy: ready to data exploitation?. Catania, Italy.
Sep 11-15, 2023	🔖 109° Congresso Nazionale, Società Italiana di Fisica. Salerno, Italy.
Mar 8, 2023 (*virtual*)	🔖 Invited talk at TESS Science Talks. Massachusetts Institute of Technology, Cambridge, USA.
Oct 27, 2022	🔖 QGSKY meeting. Rome, Italy.
Jul 21, 2022	🔖 44th COSPAR Scientific Assembly 2022. Athens, Greece.
Jun 20–24, 2022	🔖 XVII Congresso Nazionale di Scienze Planetarie, Naples, Italy.

PUBLIC OUTREACH

2022-now	🔖 **Scientific explainer at two editions of Futuro Remoto (XXXVI, XXXVII)**, Naples, Italy.
Oct 2023	🔖 **Lecture for high school students on exoplanets**, Liceo G. Da Procida, Salerno, Italy.
Jan 2024	🔖 **Lecture for high school students on exoplanets and how to schedule a transit observation**, University of Naples, Italy.

TEACHING EXPERIENCE

May 2022 ▮ Assistant supervisor of a BSc thesis in Astrophysics. Title: *Studio dell'efficienza della fotosintesi su esopianeti nella zona abitabile*. Student: Alessio Calise.

▮ Gave lecture on *General Relativity* theory for the students from "Cosmology" course at the University of Naples. Naples, Italy.

Nov 2023 ▮ Assistant supervisor of a BSc thesis in Astrophysics. Title: *Demografia dei pianeti nettuniani caldi*. Student: Gennaro Petillo.

May 2024 ▮ Gave lecture on *Planetary and Star formation* for the students from "Astrophysics of Life" course at the University of Naples. Naples, Italy.

Jul 2024 ▮ Assistant supervisor of a MSc thesis. Title: *On the use of transmission spectroscopy to understand the formation of giant exoplanets through their atmospheric sulfur and nitrogen chemistry*. Student: Francesco Gallo.

COLLABORATIONS

Jan 2022 – now ▮ Member of the ExoplaNAts team;
Member of the NASA Citizen Science Project Planet Patrol;
Member of the NASA TESS Follow-up Observing Program Working Group;
Member of the PLATO Consortium;
ESA Comet Interceptor mission: observational and analysis support;

Dec 2023 ▮ LOC and SOC member, "First ExoplaNAts annual meeting, 12th December 2023"

PRIZES/AWARDS

2023 ▮ Bando mobilità, Società Italiana Scienze Planetarie Angela Corradini, Italy.

Jun 2024 ▮ Festival dello Spazio, Busalla, Italy.

SKILLS

Technical skills ▮ Development of theoretical models, analytical and critical thinking, problem solving, data analysis, data science, data preparation, data visualization, statistical inference, reporting, A/B testing.

Languagues ▮ Italian: native speaker, English: upper intermediate (B2).

Coding and informatics skills ▮ Python (advanced), Microsoft, Mathematica, Derive, LaTeX, Machine Learning, Matlab (basic).

Communication skills ▮ Strong aptitude for professional networking, public speaking, storytelling, empathy, excellent written and oral communication skills, visual communication.

SKILLS (continued)

Professional skills ◾ Excellent stress resistance, leadership, strong motivation and proactive attitude, work meeting coordinator, continuous learning, learning agility.