Le informazioni contenute nel presente "curriculum vitae et studiorum" sono rese sotto la personale responsabilità del sottoscritto, ai sensi degli articoli 46 e 47 del Decreto del Presidente della Repubblica 28 dicembre 2000, numero 445, e successive modifiche ed integrazioni, consapevole della responsabilità penale prevista dall'articolo 76 del medesimo Decreto per le ipotesi di falsità in atti e dichiarazioni mendaci.

# Dr. Eleonora Zari

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# Current position

2024-current **Postdoctoral fellow**, *Florence University*, Firenze, Italy.

My current research focuses on young stars, both luminous, high-mass OB-type stars and low-mass pre-main sequence stars. I leverage on the complementary information provided by OB and PMS stars to map star formation in the Milky Way and obtain a detailed view of the structure and star formation history of the young disc of our Galaxy.

# Past positions

2019 - 2024 Postdoctoral Researcher, Galaxy and Cosmology department, MPIA, Heidelberg, Germany.

#### Education

2015-2019 **PhD in Astronomy**, Leiden Observatory, Leiden, The Netherlands, Thesis title: Surveying young stars with Gaia: Orion and the solar neighbourhood. Supervisors: Prof. A. G. A. Brown, Prof. P.T. de

Zeeuw.

May 2018 Observing run at ESO/VLT Paranal, Pr.Id. 0101.C-0866, PI: C.

Manara, Support activities and training to observe at the VLT in Paranal.

Summer 2016, 2017, Gaia sprint, CCA, Flatiron Institute, NYC, USA and MPIA, Heidelberg,

2018 DE, Series of workshops aimed at the scientific exploitation of the Gaia data.

September 2016 Summer School on Astrostatistic and Data Mining, University of

Heidelberg (DE), Lectures and problem sets on statistical techniques and their applications to astronomical datasets...

2012–2014 Master's degree in Physics, University of Milan, Milan, Italy, Supervisors: Prof. M. Lombardi. Prof. J. Alves...

2008–2012 Bachelor's degree in Physics, University of Milan, Milan, Italy, Supervisor: Prof. M. Lombardi...

# Large projects and collaborations

Dec 2019 - present

**SDSS-V OB star program lead**. Tasks include: target selection, science verification and data quality control of the program focused on observing massive stars in the Milky Way and Magellanic clouds.

Nov 2020 - present

SDSS-V Young Stars group co-chair. Tasks include: organising working group internal discussion, moderating the internal mailing list, and co-chairing by-weekly telecoms.

Jan 2021 - present

4MOST - 4SYS science core-team member. I have been member of the 4MOST Survey of Young Stars/S12 since 2019, and I have joined the 4MOST science team when the survey was officially approved as a participating survey. I coordinate the science verification effort of S12 of and the cross - validation effort between the young star programs in SDSS-V and 4MOST. I am a member of the internal working group IWG3.

# Observing time

#### PΙ

- 70 nights, FEROS@LaSilla 2.2m divided in around 30 nights in P110, 30 nights in P111, and 10 in P112, title: "Surveying the Brightest Luminous and Hot Stars in the Milky Way".

#### Co-I

- 12.5 nights, Nordic Optical Telescope, PI: H.-W. Rix, title: "Surveying the Brightest Luminous and Hot Stars in the Milky Way"; this is the Northern counterpart of the program accepted at La Silla.
- JWST GO 1759, PI: M.C. Ramirez-Tannus, MPIA, title: "Physics and Chemistry of Planet-Forming Disks in Extreme Radiation Environments".
- JWST GO 2183, PI: S. Zeegers, ASIAA, title: "Illuminating the dust properties in the diffuse ISM with JWST".

# Supervision of students

Jan 2018 - Jan 2019 Hossein Hashemi, Master student, Leiden University, Title: 3D mapping of massive stars in the solar neighbourhood with Gaia DR2.

Sept 2018 - Sept **Tom Sweegers**, *Master student*, Leiden University, Title: Searching 2019 for runaway stars in Gaia DR2.

- June 2021-Sept Domenica Garzon, Summer intern, MPIA, Project title: Mapping the
- 2021 Birth Places of Young Stars in the Milky Way.

  A paper resulted from the project: Garzon D., Frankel N., Zari E. et al. (2024)

# **Teaching**

- 2015-2019 Teaching assistant for the course "Project Management in Astronomy", Leiden University
- 2015-2019 Organiser of the master's student final colloquia, Leiden University

# Service to the community

- 2025 **SOC member**, *Symposium "Young Stars and clusters"*, EAS, Cork, Ireland, 23-27 June 2025.
- 2025 **Member of the Seminar Committee**, responsible for organising fortnightly seminars, joint between the Observatory of Arcetry and Florence University.
- 2023 **Remote Reviewer**, *JWST Cycle 2 and Cycle 3*, Stellar Populations.
- 2023 **Remote Reviewer**, *HST Cycle 31*, Stellar Populations.
- **SOC member**, *Special Session "The Young Milky Way"*, EAS, Krakow, Poland, 10-14 July 2023.
- 2023 **SOC member**, *SDSS-V/IReNA science festival*, Leuven, Belgium, 3-7 April 2023.
- 2020 Remote referee, ERC-ADG Step 2.
- Since 2017 Referee, for A&A, APJ, MNRAS.
- 2020-2022 **Postdoc representative**, MPIA.
- 2018 2019 Co-organizer, Gaia group meeting, Leiden, NL.
  - July 2018 **SOC member**, Splinter session, CoolStars20, Boston (MA), USA.
- 2017 2018 Co-organizer, PhD talks, Leiden, NL.

# Grants, Honors, Awards and Recognitions

- 2024 **Unifi4Future Fellowship**, *University of Florence*, *Florence*, *Italy*.
- 2019 **PSL postdoctoral fellowship**, in Astrophysics at Paris Observatory, Paris, France (declined).
- 2018 **LKBF grant**, to attend the conference CoolStars20, Boston (MA), USA.
- 2017 **IAU grant**, to attend the IAU Symposium 330, Astrometry and Astrophysics in the Gaia Sky, Nice, France.
- 2016, 2017 **A&A highlighted papers and covers**, Zari et al., 2016 and Zari et al., 2017.

### Selected outreach activities

- Summer 2018 **Volunteer**, *UNAWE Discovery Club*. http://www.unawe.org/getinvolved/discoveryclub/
  - 2017 2018 **Co-organizer**, Astronomy on Tap Leiden. http://astronomyontap.nl/
    - 2011-2014 **Collaborator**, Lo Spettacolo della Fisica. https://spettacolo.fisica.unimi.it/

#### Selected talks:

I presented my work in international conferences and workshops, giving several talks and poster presentations.

- February 2025 **Invited talk**, *Justification for spectroscopy*, Roman Galactic Plane Survey Workshop, Online.
  - July 2024 **Contributed talk**, *The star formation history of the young Milky Way disc*, EAS 2024, Padova, Italy.
  - June 2024 **Contributed talk**, *Status update on the MWM-OB program*, SDSS-V Collaboration meeting, Las Cruces (NM, USA).
  - May 2024 **Contributed talk**, *The recent star formation history of the Galactic disc*, Star Formation across Cosmic Scales: machine learning insights and applications (Budapest, Hungary).
  - August 2023 **Invited talk**, Summary of the science goals and status of the massive star program in SDSS-V, SDSS-V Collaboration meeting (New York, USA).
    - April 2023 **Invited Review**, *OB associations*, Protostars & Planets VII (Kyoto, Japan).
    - June 2022 **Contributed talk**, *The star formation history of the Galactic disc*, Gaia Symposium (EAS, Valencia).
  - August 2021 **Plenary Talk, invited**, *Mapping OBA stars in the Galactic disc*, SDSS-V Collaboration Meeting.
  - March 2021 **Plenary Talk, invited**, *Young stellar clusters as seen by Gaia*, CoolStars 20.5, Boston, MA.
  - Since 2020 **Colloquia**, at Keele (UK), Sheffield (UK), Nijmegen (NL), Vienna (AT), Leuven (BE), INAF Torino (IT), ESO Garching (DE).
  - July 2018 **Contributed talk**, *3D mapping of the solar neighbourhood with Gaia DR2*, Cool Stars 20, Boston (MA), USA.
  - June 2018 **Contributed talk**, *The Gaia view of the Orion star forming region*, The Olympian Symposium 2018, Paralia Katerini, Mount Olympus, Greece.

June 2017 **Contributed talk**, *Mapping young stellar populations towards Orion with Gaia DR1*, Francesco's Legacy, Star Formation in Space and Time, Florence, Italy.

Florence, 12/05/2025

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