

Enrico Congiu

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Nationality: Italian

Areas of Specialization

Astrophysics • Star-forming galaxies, Ionized nebulae, Interstellar Medium, Active Galactic Nuclei.

Career

CURRENT POSITION

2022– ESO FELLOW, European Southern Observatory

PAST APPOINTMENTS

2020–2022 CATA/DAS POSTDOCTORAL FELLOW, Departamento de Astronomía – Universidad de Chile
2019–2020 MAGELLAN TELESCOPE OPERATOR, Las Campanas Observatory – Carnegie Institution for Science
2018–2019 STUDENT FELLOW, Las Campanas Observatory – Carnegie Institution for Science

LONG-TERM VISITS AND OTHER AFFILIATIONS

2019 ASSOCIATE, Istituto Nazionale di Astrofisica (INAF) – Osservatorio Astronomico di Brera
2017 VISITING PH.D. STUDENT, University of California, Santa Barbara (June 2017 - August 2017)
2016–2018 ASSOCIATE PHD STUDENT, Istituto Nazionale di Astrofisica (INAF) – Osservatorio Astronomico di Brera

Publications

Author of 59 refereed publications (of which 5 as first author) with 1937 total citations and h-index 25 according to the NASA ADS system, and numerous non-refereed publications. A complete list of publications can be found [here](#).

Education and Background

EDUCATION

2019 PH.D. IN ASTRONOMY, Università di Padova.
• Title: “The physics of the extended narrow-line region in active galactic nuclei.”
• Thesis defense: March 5th, 2019.
2015 MSc IN ASTRONOMY, Università di Padova.
2013 BSc IN ASTRONOMY, Università di Padova.

LANGUAGE SKILLS

NATIVE LANGUAGE: Italian
OTHER LANGUAGES: English, Spanish

PROGRAMMING SKILLS

OS: Linux, MacOS, Windows
PROGRAMMING LANGUAGES: Python, IDL (basic), MATLAB (basic)
DATA QUERY: mySQL, MariaDB
DATA REDUCTION: IRAF, CASA, AIPS (basic)

Teaching Experience

2023 Two classes (3 hours) for the Spectroscopy course for the MSc degree in Astronomy, Università di Padova.
2023 – Co-advisor of a master thesis (Mrs. Carla Tovo, Università di Padova).
2021 – Co-advisor Ph.D. student (Mrs. Amrita Singh, Universidad de Chile).
2021 Advisor for the “Trabajo Tutorial Basico” at Universidad de Chile (Mr. M. G. Moreno).
2018 Co-advisor of a bachelor thesis (Mr. A. Zamboni, Università di Padova).
2017–2018 Tutor activity for “Il Cielo come Laboratorio”, Università di Padova.
2016–2017 Tutor activity for BSc degree in Astronomy (50 hours), Università di Padova.
2014–2015 Tutor activity for BSc degree in Scienze e Tecnologie per l’Ambiente (90 hours), Università di Padova.

Service Activity

2024 Tutor at the 2023 NEON Observing School, Asiago, Italy, Feb 4th–16th.
2022–present Member of the Chilean National Time Allocation Committee (CNTAC) for the APEX telescope.
2021–present Reviewer for the journal “Advances in Space Research”.
2021–present Reviewer for proposals submitted to the “Agencia Estatal de Investigación” (AEI).
2021–present Review editor for the journal “Frontiers in Astronomy and Space Science”, section Extragalactic Astronomy.
2019–present Reviewer for the journal “Frontiers in Astronomy and Space Science”.
2018 LOC member of the conference “Revisiting narrow-line Seyfert 1 galaxies and their place in the Universe” Padova, Italy, April 10th-13th.
2017 LOC member of the conference “Congresso Società Astronomica Italiana (SAIt)” Padova, Italy, September 12th-15th.
2017 LOC member of the conference “Quasars at all Cosmic Epochs” Padova, Italy, April 2nd-7th.

Observing experience

2022– 107 nights as UT4 night astronomer, MUSE instrument fellow and day astronomer at the Very Large Telescope as part of my duty as ESO fellow.
2021 1 nights as a designated visitor at the La Campanas observatory (P.I. Vito).
Instrument used: IMACS
2021 3 nights as a designated visitor at the La Silla observatory (P.I. Berton).
Instrument used: EFOSC2
2019–2020 56 nights as a Magellan Telescope Operator at the Las Campanas Observatory. Early stop due to COVID-19 pandemic.
2018–2020 47 nights at the Las Campanas Observatory divided between the Du Pont telescope and the Magellan telescopes. Part of the Magellan telescopes nights were carried out during the monthly engineering runs.
Instruments used: DirectCCD and WFCCD at DuPont, LDSS3, MIKE, MagE, FIRE, FourStar, and

- IMACS at the Magellan telescopes.
- 2018 10 nights at the La Silla Observatory as an observer for the ePESSTO collaboration.
Instruments used: EFOSC2 and SOFI at NTT.
- 2018 Remote observer training with the Green Bank radio telescope.
- 2014–2018 60 nights at the Asiago Astrophysical Observatory.
Instruments used: AFOSC at the 1.82m Copernico telescope, the Boller&Chivens Spectrograph at the 1.22m Galileo telescope, and the Direct Camera at the 67/92 Schmidt telescope.

Schools and Conferences

CONFERENCES

- 2023 “LARIM”, Montevideo, November 27th–December 1st
Presented contribution: Talk
- 2023 “XVIII SOCHIAS annual meeting”, Temuco, March 13th–16th
Presented contribution: Talk and poster
- 2022 “LVM Early Science Workshop”, Germany, October 24th–27th
Presented contribution: Talk
- 2022 “Physics and Chemistry of Star Formation The Dynamical ISM Across Time and Spatial Scales”, Chile, September 26th–30th
Presented contribution: Poster
- 2022 “Joint Observatories Kavli Science Forum in Chile”, Chile, April 25th–29th
Presented contribution: Talk
- 2021 “Virtual Annual Meeting of the German Astronomical Society”, Germany, September 13th–17th.
Presented contribution: Talk
- 2021 “SDSS-IV/V Collaboration Meeting” John Hopkins University (online), USA, August 10th–12th, 16th–18th.
Presented contribution: Talk
- 2018 “Revisiting narrow-line Seyfert 1 galaxies and their place in the Universe” Padova, Italy, April 10th–13th.
Presented contribution: Talk
- 2017 “Quasars at all Cosmic Epochs” Padova, Italy, April 2nd–7th.
Presented contribution: Poster
- 2016 “International Heraeus Teacher Training Seminars: Astronomy from Four Perspectives IV. Origins of stars and planets” Firenze, Italy, August 23rd–30th.
Presented contribution: Talk
- 2014 “International Heraeus Teacher Training Seminars: Astronomy from Four Perspectives II. Space, Time and Gravitation, The case of Active Galactic Nuclei.” Padova, Italy, September 1st–6th.
Presented contribution: Talk

INVITED TALKS

- 2024 Lecture on “Observing techniques - photometry”, NEON Observing School 2023, Asiago Astrophysical Observatory, Feb. 5th.

SEMINARS

- 2023 “Classification of emission-line nebulae in the PHANGS-MUSE sample: a Bayesian approach”, Universidad Andrés Bello, June 7th.
- 2023 “Classification of emission-line nebulae in the PHANGS-MUSE sample: a Bayesian approach”, ESO, April 5th.
- 2022 “Classification of ionized nebulae in the PHANGS-MUSE sample: a Bayesian approach”, ARI-Heidelberg University, October 20th.

- 2021 “Classification of ionized nebulae in the PHANGS-MUSE sample: a Bayesian approach”, Ringberg seminar series (online), June 22nd.
- 2021 “Classification of ionized nebula in the PHANGS-MUSE sample.”, Universidad de Chile, Santiago, Chile, March 21st.
- 2020 “The strange case of Mrk 783.”, Aalto University Metsähovi Radio Observatory (online), Finland, November 21st.
- 2020 “Pc-scale radio jet in the NLS1 Mrk 783”, AGN Club meeting (online), Chile, May 15th.
- 2019 “The Extended Narrow-line Region in Nearby AGN”, Universidad de Chile, Santiago, Chile, March 21st.
- 2019 “Physics at high angular resolution with PHANGS”, Università di Padova, Padova, Italy, February 28th.

PHD SCHOOLS

- 2018 “GBT Remote Observer Training Workshop”, May 24th–25th, Green Bank, USA.
- 2018 “Green Bank Observatory Single Dish Training School”, May 19th–23rd, Green Bank, USA.
- 2017 “ERIS2017 European Radio Interferometry School”, October 16th–20th, Dwingeloo, The Netherlands.
- 2016 “Cargese School 2016 on Astrophysical Jets”, May 23nd – June 1st, Cargese, France.
Presented contribution: Poster
- 2016 “ESO/OPTICON School on the Use and Data Reduction of X-Shooter and KMOS” May 9th–13th, Garching, Germany.

Research collaborations

- 2021–present Sloan Digital Sky Survey V (SDSS): Local Volume Mapper science team. Role: Co-developer of the LVM Data Simulator
- 2018–present Physics at High Angular resolution in Nearby Galaxies (PHANGS). Role: Co-Lead of the MUSE Working Group
- 2017 NOT Unbiased Transient Survey (NUTS) collaboration.
- 2017–2021 extended-Public ESO Spectroscopic Survey for Transient Objects (ePESSTO) collaboration - SNe IIn/Ibn and ILOTs group.
- 2017–2020 Cherekov Telescope Array (CTA) collaboration.

Grants

- 2023 SSDF project: “Characterizing bubbles and superbubbles in the starburst galaxy NGC 253”, EUR 4200.
P.I.: E. Congiu
- 2019 3x5 Awards, Carnegie Institution for Science, USD 5000.
P.Is.: G. Blanc, F. Di Mille, E. Congiu.

Principal Investigator accepted proposals

- 2023 Instrument/Telescope: JWST
Title: “Resolving HII Regions and ISM Structure Across the Milky Way Analog NGC 253”
Time: 22.06
- 2022 Instrument/Telescope: MUSE@VLT
Title: “Unveiling the fountain: the MUSE view on the Sculptor.”
Time: 9.5 hrs
- 2021 Instrument/Telescope: MUSE@VLT
Title: “Unveiling the fountain: the MUSE view on the Sculptor.”

Time: 51.6 hrs
2018 Instrument/Telescope: DOLORES@TNG
Title: "Is Mrk 783 an interacting galaxy?"
Time: 1 hr
2018 Instrument/Telescope: VLBA
Title: "Young jet and old radio emission: Mrk 783, a puzzling NLS1"
Time: 3.0 hrs
2017 Instrument/Telescope: e-MERLIN
Title: "High-resolution imaging of the kiloparsec scale emission in Mrk 783"
Time: 13.2 hrs
2016 Instrument/Telescope: DOLORES@TNG
Title: "The very low state of the FSRQ 3C 345"
Time: 1 hr