



MARGHERITA TALIA

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Department of Physics and Astronomy "Augusto Righi"

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KEYWORDS

galaxies

surveys

spectroscopy

evolution

feedback

outflows

star formation

dust

multi-wavelength

LANGUAGES

Italian: Native

English: Proficient

German: Basic

PUBLICATIONS

(last update: September 2025)

Refereed papers: 128 |

N° citations (ADS): 7312

h-index (ADS): 48

1st author papers: 7 |

PRESS RELEASES

ELSA |

Euclid |

COSMOS-Web |

ALPINE |

COMMISSIONS OF TRUST

Referee: A&A, MNRAS

Science review panels:

NRAO, JWST

Member of: SOC's & LOC's,

PhD evaluation committees,

Post-doc hiring committees

EVENTS

ALMABO conferences |

ELSA KoM |

Euclid SWG-GAE 2024 |

EAS 2023 - SS22 |

MAIN RESEARCH INTERESTS

- Extra-galactic surveys
- Preparation of future surveys, missions, and instruments
- Galaxy formation and evolution, focusing on feedback mechanisms (e.g. outflows) and AGN-galaxy co-evolution
- Search and characterization of extremely dust obscured galaxies
- Multi-wavelength study of the multi-phase inter-stellar medium in galaxies
- Comparison between observations and models of galaxy evolution

EXPERIENCE

Senior assistant professor | Department of Physics and Astronomy

2022 – 2025

University of Bologna, Italy

Junior assistant professor | Department of Physics and Astronomy

2019 – 2022

University of Bologna, Italy

Post-doc | Department of Physics and Astronomy

2013 – 2019

University of Bologna, Italy

ASN 2020 - 2032 National scientific qualification for Associate Professor (02/C1)

EDUCATION

Ph.D. | Department of Physics and Astronomy

2010 – 2013

University of Bologna, Italy

- Astronomy
- Supervisors: Prof. A. Cimatti, Dr. M. Mignoli

Master degree | Department of Astronomy

2009

University of Bologna, Italy

- Astrophysics and Cosmology
- Supervisors: Prof. A. Cimatti, Dr. M. Mignoli
- 110/110 cum laude

Master degree | Conservatorio di Musica U. Giordano

2004

Foggia, Italy

- Piano
- Supervisor: M° M. A. D'Arcangelo

DIGITAL SKILLS

PHYTON

SMONGO

IRAF

CASA

TOPCAT

DS9

LEPHARE

BBAROLO

MORPHEUS

MPDAF

SLINEFIT

SEXTRACTOR

MAPHYS

QFITSVIEW

PANDORA.EZ

CIGALE

DATA ANALYSIS

long-slit spectroscopy

slitless spectroscopy

IFU

stacking

imaging

interferometry

uv-plane analysis

redshift measurement

SED fitting

catalogues matching

archive data querying

VISITOR-MODE OBSERVATIONS

VLT-VIMOS: 7 nights

TELESCOPE TIME (CO-I)

Large Programs
COSMOS-Web (JWST)
CHAMPS (ALMA)
ALPINE (ALMA)
VANDELS (VLT-VIMOS)

>40 normal programs

GRANTS AND PROJECTS (PI)

ELSA |  | Euclid Legacy Science Advanced analysis tools

 2024 – 2027

- Call: HORIZON-CL4-2023-SPACE-01
- Project number: 101135203 | 
- Awarded funding: €1.5M

RS-NIRdark |  | Radio-Selected Near Infra-red Dark Galaxies

 2019 – present

MAIN RESEARCH COLLABORATIONS

Active collaborations

COSMOS-Web |  | JWST treasury program in the COSMOS field

EUCLID |  | A space mission to map the Dark Universe

- Coordinator of the Euclid DR1 Science Key Project DR1-KP-GEV-4 'The baryon cycle through scaling relations' (with A. Enia and I. Momcheva)
- Coordinator of the IST:BlueGrism (with C. Scarlata; 2021 – present)
- Coordinator of the Work Package 2 "Physical parameter estimation from spectra" inside the Science Working Group on "Galaxy and AGN evolution" (2019 – present; with A. Feltre since 2024)
- Coordinator of the Euclid Pre-Launch Science Key Project KP-GEV-1 "Simulated Euclid data for galaxy & AGN evolution" (with M. Huertas-Company)

MIGHTEE |  | MeerKAT International GHz Tiered Extragalactic Exploration

MOONRISE |  | The Main MOONS GTO Extragalactic Survey

- Coordinator of the Technical Working Group 23b "Euclid: input sources and ancillary data" (with W. Hartley)

Past collaborations

ALPINE |  | The ALMA [CII] Survey

GMASS Galaxy Mass Assembly ultra-deep Spectroscopic Survey

VANDELS |  | A deep VIMOS survey of the CANDELS fields

- Coordinator of the spectroscopic measurements working group

VUDS |  | VIMOS Ultra Deep Survey

AWARDED TELESCOPE TIME (PI)

ALMA | 2021.1.01467.S | 27h

Illuminating the dark side of star formation at $z > 3$

NOEMA | S21DJ | 15.5h

Illuminating the dark side of cosmic star formation at $z > 5$

JVLA | VLA/18B-118 | 10h

Key laboratory to test the properties of the interstellar medium of a compact SFG at $z \sim 2$

CO-MENTORING MENTORING

PhD:
Behiri (2021–2025, SISSA)
Loiacono (2018–2021, UniBO)

Master:
Nacciarriti (2022, UniBO)
Mecoli (2021, UniBO)
Behiri (2021, UniBO)
Giulietti (2019, UniBO)
Loiacono (2017, UniBO)
Pantoni (2017, UniBO)

TEACHING

Physics 2 | Chemistry and
Materials Chemistry
2023 – present | 

Astronomical data
analysis techniques
(Module 2) | Astronomy
2021 – 2023

Physics 2 (Module 2) |
Chemistry and Materials
Chemistry
2021 – 2022

Geometric Optics (tutor) |
Astronomy
2010 – 2011

PUBLIC OUTREACH

ELSA webinar | 
Ri(e)voluzioni | 
Aspettando Euclid | 
Musical show | *The trip of
Joe the Photon*

F. Gentile | PhD | Co-supervisor: Prof. A. Cimatti
2021 – 2024  University of Bologna, Italy

The obscured star-formation rate density at $z>3$

P. Giorgini | Master | Co-supervisor: Dr. L. Pozzetti
on-going  University of Bologna, Italy

A study on star-formation rate tracers with the zCOSMOS-Bright survey

M. Saponi | Master | Co-supervisors: Prof. F. Pozzi, F. Gentile
2024  University of Bologna, Italy

Search for dust-obscured galaxies at radio frequencies in the J1030 field

F. Fonzo | Master |
2023  University of Bologna, Italy

Search for high-redshift sources with JWST in the SMACS-0723 field

L. Parente | Bachelor |
2024  University of Bologna, Italy

Classificazione e studio della relazione $SFR-M_$ di galassie a basso redshift dalla survey SDSS*

L. Ossino | Bachelor |
2023  University of Bologna, Italy

Estimate of dust-corrected SFR from the $H\alpha$ line in galaxies from the SDSS

C. Bellatreccia | Bachelor | Co-supervisor: Prof. C. Vignali
2022  University of Bologna, Italy

Spectroscopic classification and X-ray properties in star-forming galaxies and AGN from the SDSS

INVITED TALKS AND SEMINARS

- 2025 Feb. - Seminar at OPINAS at MPE & USM (Garching, Germany)
- 2023 Jun. - Lunch talk at ESO (Garching, Germany)
- 2022 Apr. - Plenary session talk at the Euclid Consortium annual meeting (Oslo, Norway)
- 2021 Jul. - Virtual seminar at OPINAS at MPE & USM
- 2021 May - Virtual talk for the AAS Journal Author Series | 
- 2019 Nov. - Talk at the meeting ASPECS and ALMA large programs (Ringberg Castle, Germany)
- 2019 Jun. - Talk at the conference EWASS 2019 (Lyon, France)
- 2019 Jun. - Talk at the NORDITA program Zoom-In and Out: from the Interstellar Medium to the Large Scale Structure of the Universe (Stockholm, Sweden)
- 2018 Dic. - Talk at the meeting Science with multi-object spectrographs: perspectives and opportunities for the Italian community (Milano, Italy)
- 2018 Jul. - Cluster Colloquium at the Excellence Cluster Universe (Garching, Germany)
- 2018 May - Coffee talk at MPIA (Heidelberg, Germany)
- 2018 Apr. - Seminar at SISSA (Trieste, Italy)
- 2017 Jun. - Talk at the meeting Advances in Galaxy Evolution through a new Generation of Spectroscopic Surveys (Ringberg Castle, Germany)
- 2016 Dic. - Seminar at the Instituto de Física y Astronomía y Centro de Astrofísica de Valparaíso (Valparaíso, Chile)
- 2016 Nov. - ESO Colloquium at ESO Vitacura (Santiago de Chile)
- 2015 Jul. - Seminar at INAF (Padova, Italy)