






# Annalisa Pagliotta

 8<sup>th</sup> December 2000, Bolzano, Italy  
 Via Sant'Isaia 54, Bologna (BO), 40123, Italy  
 annalisa.pagliotta@unibo.it  annalisa.pagliotta@inaf.it  
 0009-0002-1567-4377




## Short Overview

I am a PhD student in Astrophysics at the Department of Physics and Astronomy at the University of Bologna. I work in the field of extragalactic astrophysics, using radio observation both in total intensity and polarisation. In particular, my research is dedicated to the study of magnetic fields in large-scale structures such as galaxy clusters and proto-clusters.



## Education

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|-----------------------|---|
| Nov. 2024 – present   |  <b>PhD in Astrophysics</b> – DiFA, University of Bologna<br>Thesis: <i>Magnetic Fields in Proto-clusters</i><br>Supervisor: Prof. Dr. Annalisa Bonafede (DiFA, INAF - IRA, Bologna)<br>Co-supervisors: Dr. Christopher J. Riseley (AIRUB, Bochum); Dr. Chiara Stuardi (INAF - IRA, Bologna)   |
| Sep. 2022 – Oct. 2024 |  <b>Master Degree in Astrophysics and Cosmology</b> – DiFA, University of Bologna<br>Thesis: <i>Constraining the magnetic field in the galaxy cluster Abell 2142 using MeerKAT L-band polarisation data</i><br>Supervisor: Prof. Dr. Annalisa Bonafede (DiFA, INAF - IRA, Bologna)<br>Co-supervisor: Dr. Christopher J. Riseley (AIRUB, Bochum)<br>Grade: 110/110 cum laude<br>Link: <a href="https://amslaurea.unibo.it/33255">amslaurea.unibo.it/33255</a> |
| Sep. 2019 – Sep. 2022 |  <b>Bachelor Degree in Astronomy</b> – DiFA, University of Bologna<br>Thesis: <i>Dynamics of collisional systems</i><br>Supervisor: Prof. Marcella Brusa (DiFA, INAF - OAS, Bologna)<br>Grade: 109/110<br>Link: <a href="https://amslaurea.unibo.it/26566">amslaurea.unibo.it/26566</a>  |
|                       |  <b>Internship in Scientific Dissemination</b> – INAF - IRA  |
| Sep. 2014 – Jul. 2019 |  <b>Scientific High School Diploma</b> – Scientific High School 'Evangelista Torricelli', Bolzano<br>Grade: 100/100  |

## PhD Schools and Workshops

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|--------------------|---|
| Jul. 14 – 18, 2025 |  <b>MeerKAT polarization workshop</b> – INAF - IRA |
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## Certificates

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| Dec. 2018 |  <b>Cambridge English: First (FCE)</b><br>Level: B2 |
| Apr. 2018 |  <b>Goethe-Institut</b><br>Level: B2                |




## International Seminars and Conferences

I was invited to give 1 talk at international institutes. Also, I gave 3 contributed talks at international meetings.




### Invited Seminars

- |               |  |
|---------------|--|
| Oct. 23, 2024 |  <b>INAF - IRA</b> – Bologna, Italy<br><i>Constraining the magnetic field in the galaxy cluster Abell 2142 using MeerKAT L-band polarisation data</i> |
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## Contributed Talks at Conferences

- Jun. 23 - 27, 2025  **Conference EAS 2025** – Cork, Ireland  
*Magnetic Fields in Proto-clusters*
- Jun. 16 - 20, 2025  **Conference SKAO Science Meeting 2025** – Goerlitz, Germany  
*Magnetic Fields in Proto-clusters towards the SKAO Era*
- Nov. 18 - 22, 2024  **Conference COsmic Magnetism with RADio Astronomy (COMRAD) 2024** – Pisa, Italy  
*Constraining the magnetic field in the galaxy cluster Abell 2142 using MeerKAT L-band polarisation data*


## Awards

- Jun. 2025  **Merit Scholarship** -- Autonomous Province of Bolzano  
Awarded to university students and recent graduates demonstrating outstanding academic performance based on exams taken and degree completion between November 2023 and October 2024 at Italian universities or higher technical education institutions in Italy
- Feb. 2024  **Academic Incentive Award** – University of Bologna  
Granted to students enrolled in the 2023/2024 academic year, matriculated in the 2022/2023 academic year in STEM-related programs, and selected based on merit
- Dec. 2020  **Academic Incentive Award** – University of Bologna  
Granted to students enrolled in the 2020/2021 academic year, matriculated in the 2019/2020 academic year in programs considered of national interest, and selected based on merit



## Academic Activity

- Jul. 2022 - Oct. 2024  **DIFA Council Member** – University of Bologna  
- Role of student representative  
- Mediation between DIFA students and higher organs  
- Definition of objectives based on the prominent interest activities and the relative availability of structures, services and equipment
- Dec. 2022 - Oct. 2023  **Student Tutor of Astronomy Bachelor** – University of Bologna  
- Role of interface between students and course organization  
- Role of concrete point of reference for finding general information (course access, study plan, timetable, ...)  
- Personalised learning support for students worker and students athlete





## Outreach Activity

- Nov. 2023 – present  **Scientific Disseminator** – MUA of Bolzano  
- Organisation of astronomical events at the 'Max Valier' Observatory (San Valentino, Italy)  
- Guided explanation of the night sky and mythological tales narration  
- Observation with the telescope

## Languages

-  **Mother Tongue** – Italian
-  **Other Tounges** – English (B2), German (B2)

## Technical Skills

-  **Programming Languages** – Python, FORTRAN 90, Rstudio,
-  **Software for Astrophysics** – NRAO CASA, WSClean, CIRADA RM-TOOLS, IDL, ds9, SAS HEASOFT
-  **Operating Systems** – Linux, Windows
-  **Presentation Software** –  $\text{\LaTeX}$ , PowerPoint


## Publications Summary

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The results of my research are being published on astrophysical journals. I have 1 paper as first-author published on *A&A*.

## Publications

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1. **Pagliotta, A.**, Riseley, C. J., Bonafede, A., Stuardi, C., and Loi, F., “Constraining the magnetic field in the galaxy cluster Abell 2142 using MeerKAT L-band polarisation data,” *A&A*, 700, A139, Aug. 2025.  DOI: [10.1051/0004-6361/202554881](https://doi.org/10.1051/0004-6361/202554881).