

# Meghana Pannikkote



## EDUCATION

**Erasmus Mundus Joint Masters in Astrophysics and Space Science** Oct 2023 – Present  
([EMJM-MASS](#))

University of Rome Tor Vergata (Italy), University of Belgrade (Serbia)

*Thesis: Late-time X-ray Behaviour of Tidal Disruption Events*

*Advisors: Prof. Eleanora Troja & Prof. Francesco Tombesi*

*GPA: 29.02/30.00*

**Bachelor of Technology in Engineering Physics** Jul 2019 – May 2023

National Institute of Technology Calicut, India

*Thesis: Modelling the Solar Surface Flux Transport using PINNs*

*Advisors: Dr. Bhargav Vaidya (IIT Indore) & Dr. Ram Ajor Maurya (NIT Calicut)*

*CGPA: 9.14/10.00*

## RESEARCH EXPERIENCE

**Summer Intern**, Max Planck Institute of Astronomy (MPIA), Heidelberg Jul – Sep 2024

*Topic: Radio Variability of  $z > 5$  quasars as observed by VLASS*

*Supervisor: Dr Eduardo Bañados*

**Vacation Student Intern**, Inter-University Center for Astronomy and Jun – Aug 2023

Astrophysics (IUCAA), Pune

*Topic: Hunting gamma-ray emitting FR0 radio galaxies in wide-field sky surveys*

*Supervisor: Prof Vaidehi S Paliya*

**Student Intern**, Indian Institute of Technology Indore May 2022 – May 2023

*Topic: Building a Space Weather forecasting model using Python*

*Supervisor: Dr Bhargav Vaidya*

## CONFERENCES AND SCHOOLS

**MASS Summer School: Observational astronomy and data processing** Jul 2024

University of Côte d'Azur, France

*Focused hands-on activities such as spectroscopy, photometry, and data processing, with real-time astronomical observations using the C2PU telescopes at Calern Observatory.*

**VI AGN & Gravitational Lensing Conference** Jun 2024

Zlatibor, Serbia

*Link: [http://servo.aob.rs/AGN\\_GL/index.html](http://servo.aob.rs/AGN_GL/index.html)*

**MASS Winter School: From Stars to Cosmic Explosions - Bridging Scales in Astrophysical Data Analysis** Jan 2024

University of Rome Tor Vergata, Italy

*Focused on astrophysical data analysis, with hands-on activities ranging from aperture photometry to time series and CMB data analysis.*

**Beginning Astronomy Workshop: Start a data-driven journey** Feb 2023

IUCAA & Manipal Centre for Natural Sciences, Manipal University

*Introductions to stellar and solar astronomy, low- & high-redshift galaxies, and their evolution, along with hands-on sessions from each of these fields.*

## ZTF Summer School: Multi-messenger astrophysics

Jul 2022

University of Minnesota and Caltech

*Provided training in data processing of ZTF survey data using data science techniques such as Bayesian inference, time-series analysis and machine learning.*

## SCIENTIFIC TALKS

### *Unveiling Gamma-Ray emitting FR0 Radio Galaxies*

Jun 2024

Presented at the VI AGN & Gravitational Lensing Conference, Zlatibor, Serbia

## PUBLICATIONS

**Meghana Pannikkote, Vaidehi S. Paliya and D. J. Saikia** “Hunting Gamma-Ray-emitting FR0 Radio Galaxies in Wide-field Sky Surveys” (2023) [ApJ 957 73](#)

## SCHOLARSHIPS AND HONORS

### Erasmus Mundus Scholarship

2023 – 2025

*Funded by the European Union for the Masters in Astrophysics and Space Science (EMJM-MASS)*

### Gold Medalist

2023

*B.Tech. Engineering Physics at National Institute of Technology Calicut, India*

## CERTIFICATION

**Fluid Dynamics for Astrophysics**, IISER Pune, NPTEL Online Certification

Jan – Apr 2022

**Introduction to Unsupervised Learning**, DPhi Online Certification

Dec 2021

**Data-driven Astronomy**, University of Sydney, Coursera

Feb 2021

## TECHNICAL SKILLS

### *Programming Languages:*

- Python
- C++
- SQL & ADQL
- L<sup>A</sup>T<sub>E</sub>X

### *Softwares:*

- ds9
- HEASoft
- CASA tools
- TOPCAT

### *Additional:*

- Machine Learning
- Version control using Git
- Unix shell scripting