

Adrien Anthore

*Graduate with a MSc in Astrophysics
specializing in observational astrophysics.*

Research interests: Galaxy: general - Radio lines: galaxies
Radio continuum: galaxies - Instrumentation: interferometers
Methods: observational - Methods: data analysis - Deep Learning.

 [Web Page](#)  [inLinkedIn](#)  [Github](#)

Education

- 2022 – 2024 **Master in Space Sciences and Technologies**, *Observatoire de Paris - PSL*, Paris.
International Research Track, major in Observational Astrophysics. General astrophysical training with a focus on Observational techniques, data analysis, instrumentation, HPC, and Machine Learning.
- 2019 – 2022 **Bachelor of physics**, *Sorbonne Université*, Paris.
General physics, intensive track focused on theoretical and mathematical aspects.

Research Experience

- 2023 – 2024 **Master 1, 2 internships & Lab Insertion**, *LERMA (Observatoire de Paris)*, 38 weeks total.
Supervised by **D. Cornu**. Subject: Detection and characterization of sources in radio astronomical datasets using Deep Learning.
- 2022 **Lab Insertion**, *GEPI (Observatoire de Paris)*, 2 weeks.
Supervised by **W. Van Driel & J.-M. Martin**. Subject: HI line observations of galaxies with the Nançay Radio Telescope.

Programming skills & Scientific Computation

Languages

Python, C, C#, advanced.
Scientific computing, HPC/HPDA, and development.

High-Performance Computing (HPC)

MPI, CUDA, intermediate.
Scientific computing.

Statistical Learning

Frameworks: **CIANNA, Scikit-Learn, Tensorflow, PyTorch**, advanced.
Deep Learning, Computer Vision, Clustering (MLP, CNN, ...).

Allocations on calculators

Minerva server, MesoPSL server, Tycho cluster.
GPU computing, SLURM.

Observationnal Projects

Research project

- 2022 **Nançay Radio Telescope 100m**, observation of 8 edge-on late-type galaxies, data product send to [EDD database](#), ~20 hours.

Other projects

- 2023 **Meudon's observatory T-60 & T-45**, *Master 1 training*, multi-band observation of M42 and bright stars, ~8 hours.
- 2022 **Paris' observatory 3m single dish antenna**, *3rd year bachelor training*, HI observation of clouds in the Milky-way, ~8 hours.
- since 2020 **Amateur optics & Electronically-Assisted devices**, I perform observation of all kind of objects and introduce amateurs to sky observations.

Scientific animation and outreach

Student organisation involvement

- 2024 President of "BDE de l'Observatoire de Paris" (Student Council).
- 2022 Head of the communication department at Top Aéro, [web site](#).
- 2021 Head of the events department at Top Aéro, [list of the events](#).
- 2020 – 2022 Participation in the experimental rocket project Zéphyr at Top Aéro, launched in 2022, [project page](#).

Popularization involvement

- since 2021 **L'Observatoire d'Adrien**, Popularization program on the internet, scientific content focusing on astrophysics, astronomy, and research, [YouTube](#), [TikTok](#), and [Instagram](#).
- since 2021 **Talks in schools**, I regularly give astronomy presentations on stars, planets, etc... to students of all ages (1-2h).
- 2023 – 2024 **Fête de la Science**, *Observatoire de Paris, Meudon*, activities around astronomy and astrophysics, 3 days/year, [web site 2023](#), [web site 2024](#).
- 10/2022 **Fête de la Science**, *Sorbonne Université, Paris*, activities around aeronautics and aerospace, 2 days, [web site](#).
- 10/2021 **Festival Explor'Espace**, *Montrouge*, activities around aeronautics and aerospace, 3 days, [web site](#).

Conferences and workshops

- 07/2024 **EAS 2024 - SS31: The Square Kilometre Array Observatory: pathway to science operations**, *Padova*, [ePoster](#), [web site](#).
- 05/2024 **AI for Radioastronomy**, *Göteborg*, conference, [web site](#).

Teaching

- since 2023 **SPRINT Summer Camp**, *Sorbonne University*, Introduction to Astrophysics - ~4h/year (volunteering) *2025 in prep*.

Publications

Link to my scientific productions on [NASA/ADS](#), or [ORCID](#).