Adrien Anthore

Study Engineer (IE) specializing in Radioastronomy and Deep Learning.

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

" Web Page inLinkedin Github

Research Experience

2025 **Study Engineer (IE)**, GALHECOS (Observatoire Astronomique de Strasbourg).

Detection and characterization of HI sources in LADUMA data using CNN and CIANNA framework. Supervisor: L. Chemin.

2023 – 2024 Master 1, 2 internships & Lab Insertion, LERMA (Observatoire de Paris).

Detection and characterization of sources in radio astronomical datasets using Deep Learning. Supervisor: **D. Cornu**.

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.

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

Jean-Zay, MesoPSL mesocenter, CCUS, Tycho cluster.

Scientific computing, Parallel computing, GPU computing, SLURM.

Observationnal Projects

Research project

2022 **Nançay Radio Telescope 100m**, observation of 8 edge-on late-type galaxies, data product sent to EDD database, \sim 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 kinds of objects and introduce amateurs to sky observations.

Scientific life 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*.

 Outreach involvement
 - since 2021 **L'Observatoire d'Adrien**, Popularization program on the internet, scientific content focusing on astrophysics, astronomy, and research, YouTube, TikTok, and Instragram.
 - since 2021 **Talks in schools**, I regularly give astronomy presentations and discussions 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

- 09/2025 Pathfinder HI Survey Coordination Committee (PHISCC), Cagliari, Italy, workshop, web site.
- 07/2024 EAS meeting 2024, Padova, Italy, ePoster, web site.

Teaching

- 2025 **High school math teacher**, Lycée Teilhard de Chardin, general math teaching 114h.
- 2023 2024 **SPRINT Summer Camp**, *Sorbonne University*, Introduction to Astrophysics ~4h/year (volunteering).