Adrien Anthore

PhD student 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 – 2028 *PhD student*, Automatic detection of the HI gas line in massive data from pre-Square Kilometre Array surveys, *GALHECOS* (Observatoire Astronomique de Strasbourg), Strasbourg, France.

Director: L. Chemin.

2025 **Study Engineer (IE)**, GALHECOS (Observatoire Astronomique de Strasbourg), Strasbourg, France. Detection and characterization of HI sources in LADUMA data using CNN and CIANNA framework.

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

Outreach

since 2022 **Fête de la Science**, Sorbonne Université, Observatoire de Paris, Observatoire Astronomique de Strasbourg, scientific activities and animations, 3 days/year.

since 2021 **L'Observatoire d'Adrien**, Popularization program on the internet, scientific content focusing on astrophysics, astronomy, and research, YouTube, TikTok, and Instragram.

10/2021 **Festival Explor'Espace**, *Montrouge*, activities around aeronautics and aerospace, 3 days, web site.

Talks in schools, I sometimes give astronomy presentations and discussions on stars, planets, etc. to students of all ages (1-2h).

Conferences and workshops

- 10/2025 CIANNA user workshop, Paris, France, web site.
- 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).