# 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.

*11 rue de l'Université*
*67000 Strasbourg, France*
 Web Page    in*Linkedin*    *Github*

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## 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**.

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## 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.

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## Programming skills & Scientific Computation

### Languages

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

### High-Performance Computing (HPC)

**MPI, CUDA**, intermediate.
Scientific computing, GPU computing.

### Statistical Learning

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

### Allocations on calculators

**Jean-Zay (AD010416753: 4kh H100 GPU), MesoPSL mesocenter, CCUS, Tycho cluster**.
Scientific computing, Parallel computing, GPU computing, SLURM.

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## 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

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| 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

### Undergraduate level

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| 2026 | **Numerical Analysis**, *Université de Strasbourg*, 2nd year Licentiate degree, 24h eqTD. |
| 2026 | **Introduction to Unix & Python**, *Université de Strasbourg*, 1st year Licentiate degree, 32.5h eqTD. |

### High school level

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