#### CENCA's Bridge in Astrophysics

Internship Learning Records
August - November 2023



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Research overview, physical and mathematical foundations of Radioastronomy, and chronological record of the learning process during the internship in Astrochemistry

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#### An ALMA multiband study of dust in two protostellar winds

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Institute: National Radio-Astronomy Observatory

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#### Dust in the wind

- 1.1 Research justification
- 1.2 Learning goals

Schedule - Learning program

Chapter 3
Stellar evolution

Radioastronomy fundamentals

Radio-telescope and interferometers fundamentals

# Chapter 6 ALMA interferometer

#### Low mass class 0 systems under study

- 7.1 HH212 as antecedent
- 7.2 Barnard 228
- 7.3 Barnard 335

## Using CARTA to visualize astronomical data

- 8.1 Installing CARTA
- 8.2 Loading data
- 8.3 Contour maps
- 8.4 Statistical analysis
- 8.5 Contour maps revisited

#### Astronomical data analysis with Python

- 9.1 Python 101
- 9.2 Astropy

Chapter 10
Achievements chronology

Conclusions, summary and results

Bibliographical resources