**Observational Radio Astronomy**

An introduction to the principles of practical observational radio astronomy. Topics include observation scheduling, source identification, spectroscopy, astronomical data analysis, and astronomical data proccessing.

Requirements:

PHYS600 (Physics II)

ASTR601 (Astrophysics)

Learning Outcomes:

Students who successfully complete this course should be able to:

- Determine source properties using trusted resources to plan an observation.

- Understand how emission from sources is created and detected using a radio telescope.

- Carry out a practical observation to determine certain properties about a source.

- Proccess astrophysical data using standardised techniques of data analysis.

- Interpret astrophysical data along the proccessing chain and provide relevant inferences.

Learning experience

This cource requires students to perform an observation using a radio telescope. The students will be guided through the basics of designing an observation and analysing astronomical data.

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| **Assessments** | **Percentage** |
| Assignment 1: Source properties | 20% |
| Assignment 2: Observation schedule | 20% |
| Assignment 3: Astrophysical Data Analysis | 20% |
| Report | 40% |