Degree: M.Sc. in Astrophysics

### Modules:
- astro830  Elective Advanced Lectures
- astro840  Observational Astronomy

### Course:
**Radiointerferometry: Methods and Science**

**Course No.:** astro8404

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<th>Category</th>
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**Requirements:**

**Preparation:**
Einführung in die Radioastronomie (astro123), Radio Astronomy (astro841)

**Form of Testing and Examination:**
Requirements for the submodule examination (written or oral examination): Successful participation in the exercise sessions

**Length of Course:**
1 semester

**Aims of the Course:**
Basics of radiointerferometric observations and techniques; review of science highlights; use of common data analysis packages.

**Contents of the Course:**
Principles of interferometry, aperture synthesis, calibration, continuum and spectral line imaging, zero spacing, VLBI, use of AIPS and CASA, ALMA and VLA proposal writing, LOFAR and SKA, science highlights.

**Recommended Literature:**
"Synthesis Imaging in Radio Astronomy II" (ASP Conference Series, V. 180, 1998), Editors: Taylor, Carilli, Perley
Interferometry and Synthesis in Radio Astronomy (Wiley 2001), by Thompson, Moran, Swenson

On-line material