

# Module: Elective Advanced Lectures: Observational Astronomy

Module No.: astro840

## Course: Submillimeter Astronomy

Course No.: astro842

Category	Type	Language	Teaching hours	CP	Semester
Elective	Lecture with exercises	English	2+1	4	WT

### Requirements for Participation:

#### Preparation:

Basic astronomy knowledge

#### Form of Testing and Examination:

Requirements for the examination (written or oral): successful work with the exercises

#### Length of Course:

1 semester

### Aims of the Course:

Students with B.Sc. in Physics will be introduced to astronomy in the submillimeter wavelength range, one of the last spectral regions to be explored with new high-altitude ground-based or airborne telescopes, and from space

### Contents of the Course:

The basic concepts of emission/excitation mechanisms from interstellar dust and molecules are discussed as well as the properties of the observed objects: the dense interstellar medium, star forming regions, circumstellar environments. Star formation near and far is a central focus of submillimeter astronomy and will thus be introduced in depth. Telescopes, instrumentation, and observational techniques will be described in the course

### Recommended Literature:

Contemporary review articles