Modules: astro830 Elective Advanced Lectures

astro840 Observational Astronomy

Course:



Submillimeter Astronomy

Course No.: astro842

Category	Туре	Language	Teaching hours	СР	Semester
Elective	Lecture with exercises	English	2+1	4	WT

Requirements:

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