

6934 X-ray astronomy
Fr 13-15, HS Astronomie
Exercises: 1 hr. by appointment

Instructor(s): T. Reiprich
For term nos.: 5 or higher
Hours per week: 2

Prerequisites:

Introductory courses on astronomy, atomic physics, and hydrodynamics would be useful.

Contents:

X-rays are emitted from regions where the Universe is hot and wild. The lecture will provide an overview of modern X-ray observations of all major X-ray sources, e.g., remnants of exploded stars, the vicinities of lightweight and supermassive black holes, and collisions of galaxy clusters -- the most massive objects in the Universe. The physical properties of X-ray radiation as well as current and future space-based instruments used to carry out such observations will be described. In the accompanying lab sessions, the participants will learn how to download, reduce, and analyze recent X-ray data from a satellite observatory.

Literature:

A bound script of the lecture notes will be provided.

Comments:

Due to demand for live video broadcast of the lecture, the room will likely change (check course web page).