Introduction to galactic and extragalactic X-ray astronomy Fr 13-15, R. 1.11

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, e.g., remnants of exploded stars, the vicinities of lightweight and supermassive black holes, and collisions of galaxy clusters, the most massive structures in the Universe. The current and future space-based instruments used to carry out such observations will be described. At the end of the lecture there will be two lab sessions. The participants will learn how to download, reduce, and analyze recent X-ray data from a satellite observatory.

Literature:

Lecture notes will be provided.

Comments:

Due to renovations, the lecture room will likely change to 0.05.