

CHAMPP

CENTER IN HAMBURG FOR ASTRO-, MATHEMATICAL AND PARTICLE PHYSICS

LECTURE COURSE IN THE QUANTUM UNIVERSE RESEARCH SCHOOL

Winter Term 2023/2024

Galaxy evolution

Jochen Liske

Course Description:

The formation and evolution of galaxies is one of the main topics of contemporary astrophysical research. This advanced M.Sc. lecture course will comprehensively cover this topic from both an observational and theoretical perspective. We will explore the background cosmology, the linear and non-linear growth of cosmic structures, the formation of spiral and elliptical galaxies, as well as the observational techniques used to study galaxies.

Prerequisites:

While not strictly required, it is definitely helpful to be aware of the contents of both parts of the B.Sc. introductory astronomy course. The course language is English.

Literature:

- *Introduction to Galaxy Formation and Evolution,* Cimatti, Fraternali and Nipoti, Cambridge University Press
- Galaxy Formation and Evolution, Mo, van den Bosch and White, Cambridge University Press

Date and Place: Tue 14:15–15:45, SemRm 4064, Notkestr. 9, Bahrenfeld **Problem Classes:** Tue 16:00–17:30, SemRm 4064, Notkestr. 9, Bahrenfeld **Starting on:** 17 Oct 2023