

SYLLABUS

1. Introduction (~ 5 lectures)
History, Celestial Mechanics, Radiation (incl. Spectroscopy, Luminosity, Black-Body radiation), Special Theory of Relativity
2. Stars (~ 4 lectures)
Classifications, structures, evolutions, (the Sun and the Solar system)
3. Large Scale Structures of the Universe (~ 4 lectures)
Galaxies (types, formation, evolution), Galactic clusters, unsolved problems
4. Topology of the Universe (~ 5 lectures)
Possibilities, Physics in curved space-times, Qualitative Introduction to General Relativity
5. The Early Universe (~ 5 lectures)
Evolution (including: models, baryogenesis, nucleosynthesis), Inflation