

Astrophysics WS 2018/19: Preliminary schedule of lectures

09.10.2018	Lecture 1: Introduction and orders of magnitude
10.10.2018	Lecture 2: Structures in the universe (overview)
16.10.2018	Lecture 3: Radiation and transport
17.10.2018	Lecture 4: Measurement of astrophysical quantities
23.10.2018	Lecture 5: Cosmic radiation, acceleration mechanisms
24.10.2018	Lecture 6: Models for structure and evolution of stars
30.10.2018	Lecture 7: Stellar energy sources, our Sun
31.10.2018	Lecture 8: Equations of state, White Dwarfs and Neutron Stars
06.11.2018	Lecture 9: Criteria for star forming structures
07.11.2018	Lecture 10: Birth of stars and quasi-stationary states
13.11.2018	Lecture 11: Death of stars and collapsing states
14.11.2018	Lecture 12: Galaxies

20.11.2018	Lecture 13: ART: Basics (I)
21.11.2018	Lecture 14: ART: Basics (II)
27.11.2018	Lecture 15: ART: Basics (III)
28.11.2018	Lecture 16: ART: Basics (IV)
04.12.2018	Lecture 17: Outer Schwarzschild metric
05.12.2018	Lecture 18: Rotation of perihelion, Deviation of light
11.12.2018	Lecture 19: Gravitational waves
12.12.2018	Lecture 20: Inner Schwarzschild metric
18.12.2018	Lecture 21: Relativistic star equilibria
19.12.2018	Lecture 22: Gravitational collapse, Black Holes

08.01.2019	Lecture 23: Friedmann equation
09.01.2019	Lecture 24: Robertson-Walker metric
15.01.2019	Lecture 25: World models (homogeneous cosmology)
16.01.2019	Lecture 26: Cosmography
22.01.2019	Lecture 27: Explanation of cosmological observations (I)
23.01.2019	Lecture 28: Explanation of cosmological observations (II)
29.01.2019	Lecture 29: Inhomogeneous cosmology
30.01.2019	Lecture 30: Inflation