

Studying programmes: PhD studies - Astronomy and Astrophysics			
Course name: Galactic Astronomy			
Lecturers: Slobodan Ninković			
Status: Optional			
ECTS: 9			
Attendance prerequisites: None			
Course aims: Structure and dynamics of our Galaxy or Milky Way. Milky Way evolution and Local Group of Galaxies.			
Course outcome: After finishing the course, PhD student will have basic knowledge concerning the Milky Way and become qualified for future research in this field.			
Course content: History. Milky-Way Structure concerns the Milky-Way statistics and kinematics. Methods of threedimensional star counts and derivation of spatial-distribution law. Distance of the Sun to the Milky-Way centre. Mass and metallicity distributions of stars. Phase space. Solar motion, velocity ellipsoid, partial centroid. Subsystems. Rotation curve. Milky-Way dynamics in the solar neighbourhood. Dynamical constants. Interpretation of rotation curve. Potential of the Milky Way. Central massive black hole, dark matter, orbits around the centre of the Milky Way. Local Group of Galaxies. Subgroups of the Milky way and Andromeda Nebula. Missing mass in the Local Group.			
Literature: 1. Мароџник, Л. С. Сучков А. А. Галактика, 1984, Москва (in Russian). 2. Binney, J. Merrifield, M. Galactic Astronomy, 1998, PRINCETON UNIVERSITY PRESS, Princeton, New Jersey. Most recent papers according to agreement			
Number of hours: 10	Lectures: 4	Tutorials: 6	
Teaching and learning methods: Frontal, practical			
Assessment (maximal 100 points)			
Course assignments	points	Final exam	points
Lectures	10	Written exam	-
Exercises / Tutorials	10	Oral exam	60
Colloquia	20	Written-oral exam	-
Essay / Project	-		