

Modules:

physics700 **Elective Advanced Lectures**
 physics730 **Theoretical Physics**

Course:**Relativity and Cosmology II (T)**

Course No.:

| Category | Type | Language | Teaching hours | CP | Semester |
|----------|------------------------|----------|----------------|----|----------|
| Elective | Lecture with exercises | English | 4+2 | 8 | ST |

Requirements:**Preparation:**

Training in theoretical physics at the B.Sc. level

Form of Testing and Examination:

Written or oral examination

Length of Course:

1 semester

Aims of the Course:

Application of Einstein's theory of general relativity to black holes and cosmology

Contents of the Course:

Black holes
 Introduction to cosmology
 The early Universe

Recommended Literature:

V. Mukhanov, Physical Foundations of Cosmology
 T. Padmanabhan, Gravitation: Foundation and Frontiers
 J. B. Hartle, Gravity: An introduction to Einstein's general relativity