### Module:

# Elective Advanced Lectures:

### **BCGS Courses**

Module No.: physics70d

### Course:



## **Relativity and Cosmology II (T)**

Course No.:

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

#### **Requirements for Participation:**

#### 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