



**scuolagalileiana**  
di studi superiori



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

**A.Y. 2014/2015**

## **Internal Courses – Class of Natural Sciences**

### **Courses of the 1<sup>st</sup> year**

#### **CALCULUS**

Prof. Paolo Guiotto

#### **COMPLEMENTS OF ANALYSIS**

Prof. Carlo Mariconda

#### **INTRODUCTION TO PROBABILISTIC MODELS**

Prof. Alessandra Bianchi

#### **FUNDAMENTALS OF THERMODYNAMICS**

Prof. Fulvio Baldovin, Prof. Enzo Orlandini

### **Courses of the 2<sup>nd</sup> year**

#### **MEASURE THEORY**

Prof. Pier Domenico Lamberti, Prof. Paolo Ciatti

#### **INTERACTION NETWORKS IN LIVING SYSTEMS**

Prof. Amos Maritan

#### **OPEN PROBLEMS IN THE PHYSICS OF FUNDAMENTAL INTERACTIONS**

Prof. Massimo Pietroni

#### **CHEMICAL EQUILIBRIUM AND IRREVERSIBLE PROCESSES**

Prof. Giorgio Moro

#### **MEASUREMENT INSTRUMENTS AND TECHNIQUES**

Prof. Giovanni Carugno

### **Courses of the 3<sup>rd</sup> year**

*Upon request, the courses of the 4<sup>th</sup> and 5<sup>th</sup> year can be accessed during the 3<sup>rd</sup> year too.*

#### **PROBABILITY AND INTRODUCTION TO STOCHASTIC PROCESSES**

Prof. Paolo Dai Pra

#### **FOUNDATIONS OF DIFFERENTIAL GEOMETRY**

Prof. Franco Cardin, Prof. Andrea Giacobbe

#### **GENERAL RELATIVITY**

Prof. Kurt Lechner

#### **LIFE SCIENCES**

Prof. Gianni Barcaccia, Prof. Massimo Zeviani

## Courses of the 4<sup>th</sup> and 5<sup>th</sup> year

*One of the following courses can be replaced by an individual project, under the supervision of a teacher.*

### **HARMONIC ANALYSIS**

Prof. Paolo Ciatti

### **INTRODUCTION TO STRINGS THEORY**

Prof. Stefano Giusto

### **PHILOSOPHY OF SCIENCE**

Prof. Pierdaniele Giaretta, Prof. Telmo Pievani, Prof. Giulio Giorello

### **NANOSCIENCE AND NANOSYSTEMS**

Prof. Luisa De Cola, Prof. Fabrizio Mancin