



**scuolagalileiana**  
di studi superiori



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

**A.Y. 2017/2018**

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

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

#### **CALCULUS**

Prof. Paolo Guiotto

#### **COMPLEMENTS OF ANALYSIS**

Prof. Davide Vittone

#### **INTRODUCTION TO PROBABILITY MODELS**

Prof. Alessandra Bianchi

#### **INTRODUCTION TO THERMODYNAMICS**

Prof. Fulvio Baldovin

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

#### **MEASURE THEORY**

Prof. Paolo Ciatti

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

Proff. Amos Maritan, Marco Formentin

#### **FLUID DYNAMICS**

Prof. Roberto Turolla

#### **MATERIALS FOR BIOMEDICAL APPLICATIONS**

Prof. Nicola Elvassore

### **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.*

#### **ALGEBRA**

Prof. Giovanna Carnovale

#### **GENERAL RELATIVITY**

Prof. Kurt Lechner

#### **COMPLEMENTS OF ELECTRODYNAMICS**

Proff. Massimo Passera, Marco Zanetti

#### **A JOURNEY INTO DRUG DISCOVERY**

Proff. Stefano Moro, Giovanni Marzaro, Adriana Chilin, Barbara Gatto

## 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.*

### **INTRODUCTION TO STRING THEORY**

Prof. Stefano Giusto

### **DYNAMICAL FOUNDATIONS OF STATISTICAL MECHANICS**

Prof. Antonio Ponso

### **INVESTIGATING BRAIN NEURONAL NETWORKS: TECHNOLOGICAL AND THEORETICAL CHALLENGES**

Prof. Stefano Vassanelli

### **TOPICS IN COMPLEX GEOMETRY**

Proff. Jacopo Stoppa, Ugo Bruzzo

### **DATA ANALYSIS AND MACHINE LEARNING**

Proff. Lorenzo Rosasco, Marco Zanetti