

PhD courses 2022/2023, FCUL & IST

1st semester

FCUL

- Algebra
 - Representation Theory of Groups (D) (Carlos André)

IST

- Geometry
 - Differential Geometry (D) (Leonardo Macarini)
- Numerical Analysis and Applied Analysis
 - Mathematical and Numerical Methods in Fluid Dynamics (D) (Juha Videman)
- Probability and Statistics
 - Advanced Topics in Statistical Inference (D) (Paulo Soares)
 - Advanced Topics in Multivariate Analysis (D) (Isabel Rodrigues)
 - Advanced Topics in Probabilities and Stochastic Processes (D) (António Pacheco)

2nd semester

FCUL

- Mathematical Analysis
 - Multi-valued Analysis and Differential Inclusions (D) (Manuel Marques)
- Algebra
 - Quantum Groups (D) (Ângela Mestre)
- Geometry and Topology
 - Riemann Surfaces and Integrable Models (D) (Davide Masoero)

IST

- Differential Equations and Dynamical Systems
 - Calculus of Variations and Partial Differential Equations (D) (Margarida Baía)
 - Discrete Dynamical Systems (D) (Pedro Martins Rodrigues)
 - Harmonic Analysis (D) (Diogo Silva)
 - Stochastic Differential Equations (D) (Ana Bela Cruzeiro)
- Geometry
 - Knot Theory (D) (Pedro Lopes)
- Mathematical Physics
 - Mathematical Relativity (D) (Pedro Girão)
 - Feynman Integral and Applications (D) (Gonçalo Oliveira)
- Real Analysis and Functional Analysis
 - Topics in Operator Theory: Riemann-Hilbert Problems (D) (Cristina Câmara)

Master Courses - 2022/23 - FCUL

Core Courses (9 ECTS)

1st semester:

Functional Analysis – Teresa Faria

Differentiable Manifolds - Pedro Miguel Duarte

2nd semester:

Algebra – Catarina Gomes

Options (6 ECTS)

1st semester:

Combinatorics - Luís Gouveia & Ma. Manuel Torres

Mathematical Methods in Physics - Nicolas Van Goethem

Mathematical Logic – Mário Edmundo

Ordinary Differential Equations – Carlota Rebelo

2nd semester:

Computational Linear Algebra - Luís Sequeira, Ma. Manuel Torres & Carlos Albuquerque

Universal Algebra – Ma. João Gouveia

Calculus of Variations – José Francisco Rodrigues

Algebraic and Differential Topology - Carlos Florentino

Functional Differential Equations – Teresa Faria

Introduction to Algebraic Geometry – Orlando Neto