# **COURSE CATALOG**

Ph.D. in Mathematics and Computer Science

Academic year 2023/2024



# FEBRUARY 21-26

 TRADITIONAL AND EMERGING METHODS FOR HIGH PERFORMANCE COMPUTING Introduction to Quantum Computing and applications on Internet Security
 A. GIORDANO - ICAR CNR, F. PLASTINA - University of Calabria

### FEBRUARY 27-APRIL 30

RESEARCH AND CAREER PLANNING FOR DOCTORAL STUDENTS
 How to do research, write papers and project proposal, and how to prepare for a careerr as PhD
 G. GOTTLOB - University of Calabria

# **MARCH 04-08**

DIDACTICAL ASPECTS OF MATHEMATICS
 Teaching and learning Mathematical Modelling
 A. SERPE - University of Calabria

# **MARCH 18-27**

TOPICS IN PDES

Symmetry results for semilinear elliptic PDEs
F. ESPOSITO - University of Calabria

# **MAY 06-17**

TOPICS IN ALGEBRA

Cohomology of groups and locall-global questions
L. PALADINO - University of Calabria

# **MAY 17-JUNE 14**

 ADVANCED METHODS, TOOLS AND APPLICATIONS FOR ARTIFICIAL INTELLIGENCE Modelling and Solving in Answer Set Programming F.RICCA, C.DODARO - University of Calabria

#### **MAY 17-20**

• INTERPOLATION, APPROXIMATION AND THEIR APPLICATIONS

Finite element methods in the context of the Helmholtz equation S. TORDEAUX - University of Pau and the Adour Region

# **MAY 27-31**

 COMPUTER AND DATA SCIENCE INNOVATION IN MULTIDISCIPLINARY AREAS Emerging Models and Paradigms in Network Science
 F. CAUTERUCCIO - Polytechnic University of Marche

#### **JUNE 10-14**

APPROXIMATE DYNAMIC PROGRAMMING FOR DYNAMIC OPTIMIZATION PROBLEMS
 J. OHLMANN - University of Iowa

# SEPTEMBER 16-20

ADVANCED OPTIMIZATION MODELS AND METHODS
 Applications to planning complex consolidation-based freight transportation systems
 T.G. CRAINIC - University of Quebec in Montreal

