

Courses of the School

1. Proff. David Barbato, Paolo Dai Pra
Random perturbation of differential equations
2. Proff. Marco Di Summa, Samuele Fiorini
Geometric approaches to optimization
3. Proff. Marino Zennaro, Rossana Vermiglio
Numerical methods for Ordinary Differential Equations
4. Prof. Tullio Vardanega
Principles of Cloud Computing
5. Prof. Martino Bardi
Introduction to Hamilton-Jacobi equations

Courses of the “Computational Mathematics” area

1. Prof. Stefano Maset
Introduction to Delay Differential Equations
2. Prof. James Nagy
Computational Methods for Inverse Problems and Applications
in Image Processing
3. Prof. Tiziano Vargiuoli
Topics in Stochastic Analysis
4. Proff. Rossana Vermiglio, Dimitri Breda
Numerical stability of dynamical systems described by delay differential
equations
5. Proff. Nicole El Karoui, Monique Jeanblanc, Giorgia Callegaro
Recent advances in Finance and Stochastics
6. Prof. Francesco Rinaldi and Giovanni Fasano
Nonlinear optimization: Derivative-free methods

Courses of the “Mathematics” area

1. Prof. Pablo Spiga
On the O’Nan-Scott theorem in its applications
2. Prof. Luigi Salce
A soft introduction to algebraic entropy

4. Prof. Francesco Maddalena
Calculus of Variations with applications to Materials Science
5. Prof. Francesco Baldassarri, Alessandra Bertapelle and Carla Novelli
Tropical Geometry
6. Prof. Francesco Bottacin
Differential and Riemannian Geometry
7. Prof. Giancarlo Benettin, Antonio Ponno and Boris Dubrovin
Nonlinear wave equations and applications

Courses of the “Computer Science” area

1. Prof. Mauro Conti
Privacy and security for mobile cooperative devices
2. Prof. Gilberto Filè
Definite clauses applied to security
3. Dr. Umberto Grandi
Logical Frameworks for Multiagent Aggregation
4. Prof. Claudio Palazzi
Networking issues and solutions in online games
5. Prof. Maria Silvia Pini
Preference reasoning in computational social choice
and in Decision Support Systems
6. Prof. Vijay Saraswat
Resilient, Parallel, Big Data Application Frameworks in X10

Courses in collaboration with the Doctoral School on “In Engineering”

1. Prof. Gianluigi Pillonetto
Applied Functional Analysis
2. Prof. Giorgio Picci
Applied Linear Algebra
3. Prof. Fabio Marcuzzi
Computational Inverse Problems
4. Prof. Nicola Laurenti
Information theoretic Methods in Security
5. Prof. Morten Gram Pedersen

6. Prof. Subhrakanti Dey
Random Graphs and Stochastic Geometry in Networks
7. Prof. Lorenzo Finesso
Statistical methods