SSM

Scientific Colloquia

Scuola Superiore Meridionale

Academic Year 2023-2024

Cycle: Fourth cycle of highly interdisciplinary Scientific Colloquia

Seminar program

1

Flocks, schools, and crowds: Behavioral dynamics of collective motion

Date and time: 05 October 2023 - 2:30 pm CET
Speaker(s): William H. Warren
Affiliation / role: Chancellor's Professor of Cognitive, Linguistic and Psychological Sciences, Brown University - Rhode Island (USA)

2

Economic Fitness: Concepts, Methods and Applications

Date and time: 09 November 2023 - 2:30 pm CET
Speaker(s): Luciano Pietronero
Affiliation / role: full professor of Condensed Matter Physics, University of Roma "La Sapienza", Rome, Italy

3

Muon radiography and its applications

Date and time: 16 November 2023 - 2:30 pm CET
Speaker(s): Giulio Saracino
Affiliation / role: Professor of Subnuclear Physics at the Ettore Pancini Department of Physics, University of Naples "Federico II"

4

From quantum many-body physics to quantum computation with Rydberg atom arrays

Date and time: 23 November 2023 - 2:30 pm CET
Speaker(s): Hannes Pichler
Affiliation / role: professor at the Institute for Theoretical Physics, University of Innsbruck

5

The origin of chemical elements: nuclear cross section measurements of astrophysical interest

Date and time: 30 November 2023 - 2:30 pm CET
Speaker(s): Gianluca Imbriani
Affiliation / role: Full professor of Experimental Nuclear Physics - University of Naples "Federico II"

6

Ensemble optimal control problems governed by Boltzmann models

Date and time: 7 December 2023 - 2:30 pm CET
Speaker(s): Alfio Borzi
Affiliation / role: Full Professor (Chair Mathematik IX), University of Würzburg, Germany

7

Doing long wavelengths with thin materials – exploring thin materials with long wavelengths

Date and time: 14 December 2023 - 2:30 pm CET
Speaker(s): Alessandro Tredicucci
Affiliation / role: full professor at the Physics Department, University of Pisa

8

Computational Approaches for Solving General Systems of Nonlinear Equations in the Cloud

Date and time: 18 January 2024 - 2:30 pm CET
Speaker(s): Panos M. Pardalos
Affiliation / role: full professor in Industrial & Systems Engineering at the University of Florida, United States

9

The role of second law of thermodynamics in the constitutive theories of materials

Date and time: 25 January 2024 - 2:30 pm CET
Speaker(s): Vito Antonio Cimmelli
Affiliation / role: full professor of Mathematical Physics at the Department of Mathematics, Computer Science and Economics, University of Basilicata, Potenza, Italy

10

What is emergent spacetime?

Date and time: 01 February 2024 - 2:30 pm CET
Speaker(s): Silvia De Bianchi
Affiliation / role: Associate Professor of Logic and Philosophy of Science at the University of Milan, Italy

11

Empirical Ground Motion Models in Italy: from the earthquake recordings to a regionalized model

Date and time: 8 February 2024 - 2:30 pm CET
Speaker(s): Lucia Luzi
Affiliation / role: Research Director at the National Institute of Geophysics and Volcanology (INGV)

12

The Gaia mission, its legacy and beyond: present and future of Gravitational Astronomy

Date and time: 15 February 2024 - 2:30 pm CET
Speaker(s): Mario Lattanzi
Affiliation / role: Research leader INAF - Astronomical Observatory of Turin

13

Micro-to-macro variational analysis of lattice energies in Materials Science: emergence and interaction of defects

Date and time: 22 February 2024 - 2:00 pm CET
Speaker(s): Marco Cicalese
Affiliation / role: Associate Professorship of Mathematical Continuum Mechanics, Technical University of Munich

14

Can the Physics of Complex Systems Simplify Our Understanding of Seismic Occurrence?

Date and time: 29 February 2024 - 2:30 pm CET
Speaker(s): Eugenio Lippiello
Affiliation / role: Professor of Theoretical Physics, Department of Mathematical & Physics, University of Campania “Luigi Vanvitelli”

15

Galactic Archaeology: decoding the fossil record of Galaxy formation and evolution

Date and time: 07 March 2024 - 2:30 pm CET
Speaker(s): Santi Cassisi
Affiliation / role: Research leader INAF - Astronomical Observatory of Abruzzo - Teramo (Italy)

16

Unresolved Anomalies and Tensions in the Standard Cosmological Model

Date and time: 14 March 2024 - 2:30 pm CET
Speaker(s): Eleonora Di Valentino
Affiliation / role: Research Fellow at the University of Sheffield - Sheffield - England

17

Control Theory & Robust Distributed Optimization: Some Insights

Date and time: 21 March 2024 - 2:30 pm CET
Speaker(s): Thomas Parisini
Affiliation / role: Full professor and Head of the Control and Power Research Group at the Imperial College London, United Kingdom

18

Spline approximation and numerical solution of partial differential equations with Isogeometric Analysis

Date and time: 04 April 2024 - 2:30 pm CEST
Speaker(s): Giancarlo Sangalli
Affiliation / role: full professor of Numerical Analysis at the University of Pavia, research associate at CNR-IMATI “E. Magenes”

19

Present and future of the European optical telescopes: the Wide-field Spectroscopic Telescope

Date and time: 11 April 2024 - 2:30 pm CEST
Speaker(s): Pietro Schipani
Affiliation / role: Director at INAF - Capodimonte Astronomical Observatory - Italy

20

An overview of polytopal approximations of partial differential equations

Date and time: 02 May 2024 - 2:30 pm CEST
Speaker(s): Daniele Di Pietro
Affiliation / role: Full professor of Numerical Analysis at University of Montpellier, Director of Institut Montpelliérain Alexander Grothendieck

21

Explaining and controlling turbulent flows through deep learning

Date and time: 09 May 2024 - 2:30 pm CEST
Speaker(s): Ricardo Vinuesa
Affiliation / role: Associate professor at the Department of Engineering Mechanics, KTH Royal Institute of Technology, Stockholm, Sweden

22

Some aspects of virtual medicine and human space science research

Date and time: 16 May 2024 - 2:30 pm CET
Speaker(s): Paolo Russo
Affiliation / role: Full Professor at the University of Naples “Federico II” - Naples (Italy)

23

Waves of motile cilia: where physics, fluid dynamics and dynamical systems meet biology

Date and time: 23 May 2024 - 2:30 pm CEST
Speaker(s): Pietro Cicuta
Affiliation / role: Head of Biological and Soft Systems of Corpus Christi College, Fellow Chair of IOP Biological Physics group

24

Asset pricing under transition scenario uncertainty and model ambiguity

Date and time: 30 May 2024 - 2:30 pm CET
Speaker(s): Peter Tankov
Affiliation / role: full professor of quantitative finance at ENSAE, France

25

Climate change adaptation of transport and flood defence infrastructure: is there a future for nature-based solutions?

Date and time: 6 June 2024 - 2:30 pm CEST
Speaker(s): Alessandro Tarantino
Affiliation / role: Full Professor at the University of Strathclyde, Glasgow, United Kingdom

26

Understanding the Active Galactic Nuclei paradigm through time variability studies

Date and time: 13 June 2024 - 2:30 pm CEST
Speaker(s): Maurizio Paolillo
Affiliation / role: Full Professor at the University of Naples “Federico II” - Naples (Italy)

27

Understanding material microstructure

Date and time: 27 June 2024 - 2:30 pm CEST
Speaker(s): Sir John Ball
Affiliation / role: Professor of Mathematics in the Department of Mathematics, Heriot-Watt University, and Maxwell Institute for Mathematical Sciences, Edinburgh

28

Contact networks in shear-thickening suspensions

Date and time: 04 July 2024 - 2:30 pm CEST
Speaker(s): Jeff Morris
Affiliation / role: Professor of Chemical Engineering & Director of the Levich Institute CUNY City College of New York