

# XXI Frascati Spring School "Bruno Touschek" in Nuclear, Subnuclear and Astroparticle Physics

8th Young Researchers' Workshop "Physics Challenges in the LHC Era"

Laboratori Nazionali di Frascati, Italy, May 13-17, 2024

## Scientific Program:

Theories Beyond the Standard Model  
Veronica Sanz (Valencia U.)

BSM physics at high energies: an experimental review  
Steven Lowette (Vrije U. Brussels)

Searches for BSM physics at low energy: a theory overview  
Martin González-Alonso (Valencia U.)

The g-2 experiment: status and prospects of precision tests  
of the Standard Model with muons  
Graziano Venanzoni (Liverpool U. & INFN Pisa)

Neutrino theory and phenomenology  
Gabriela Barenboim (Valencia U.)

Probing neutrino masses in the laboratory  
Christoph Wiesinger (TUM Munich)

Neutrinoless double-beta decay search: experimental aspects  
Riccardo Brugnera (Padua U. & INFN Padua)

Modelling nuclear processes in stellar evolution and nucleosynthesis  
Alberto Mengoni (CERN & INFN Bologna)

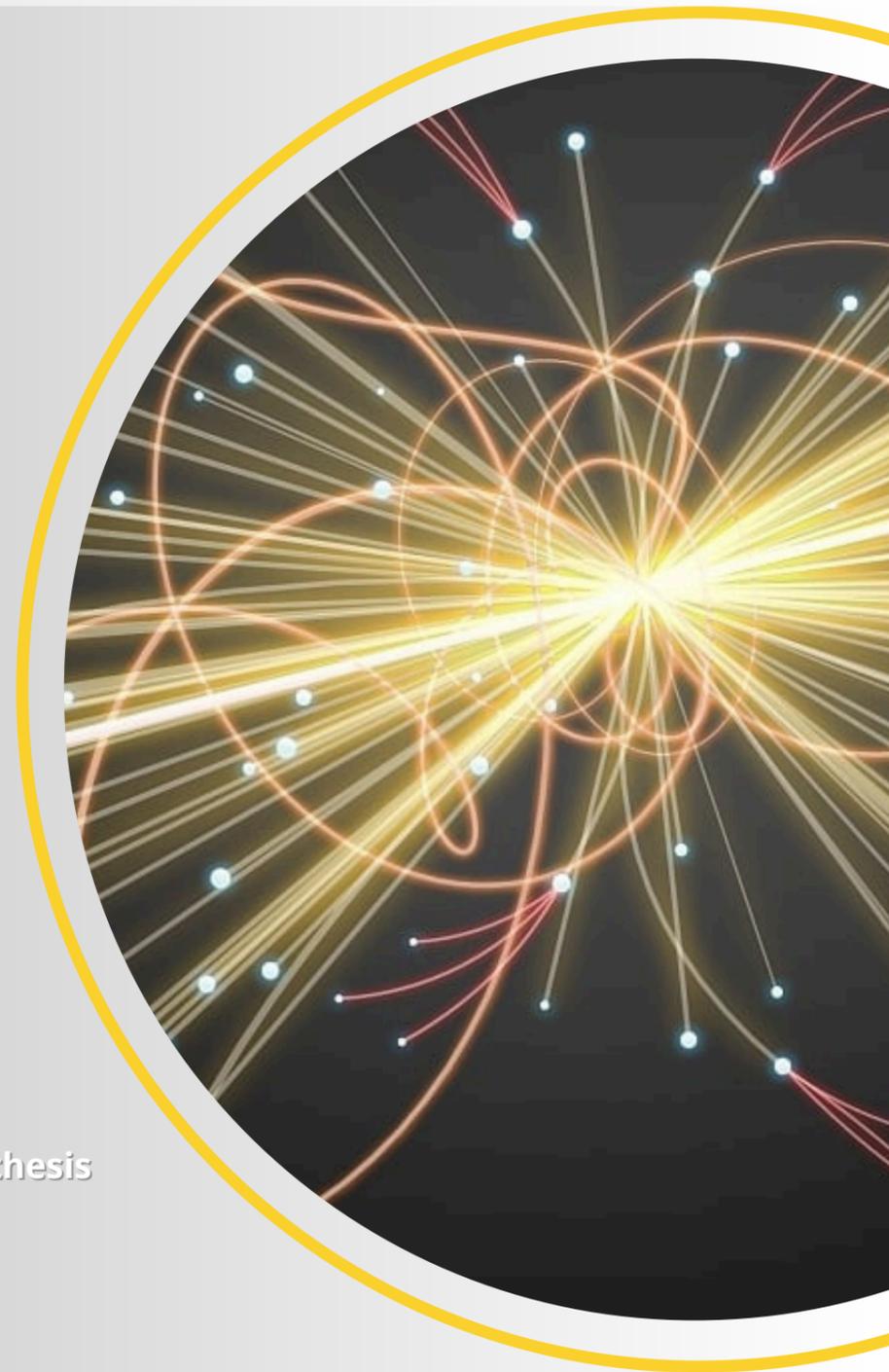
Nuclear astrophysics in plasma environment  
Domenico Santonocito (INFN LNS)  
Silvia Pisano (E.Fermi Centre & INFN LNF)

Introduction to plasma acceleration  
Gemma Costa (INFN LNF)

**Spring School Colloquium** - May 16th, 18:00  
Machine Learning: from mammal's brain to statistical mechanics  
Elena Agliari (Sapienza U. Rome)

## International Scientific Committee

Tancredi Carli (CERN)  
Patrick Decowski (Amsterdam U.)  
Elena Ferreiro Gonzalez (Santiago de Compostela U.)  
Benjamin Fuks (LPTHE & Sorbonne U. Paris)  
Tim Gershon (Warwick U.)  
Olga Mena Requejo (Valencia U.)



## Local Organizing Committee

Fernando Arias Aragòn (INFN LNF)  
Emanuele Bagnaschi (INFN LNF)  
Gennaro Corcella (INFN LNF, chair)  
Enrico Nardi (INFN LNF & NICPB Tallinn)  
Alessandro Paoloni (INFN LNF)  
Silvia Pisano (E.Fermi Centre & INFN LNF)  
Dibyashree Sengupta (INFN LNF)  
Marianna Testa (INFN LNF)

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<http://www.lnf.infn.it/conference/lnfss/24>



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