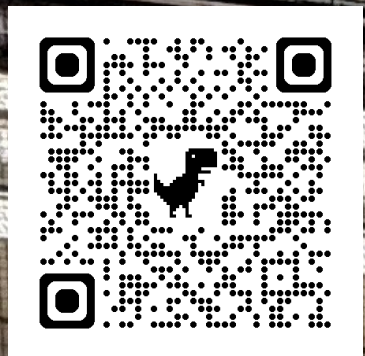




# 2026 PROGRAM OF ACTIVITIES

**FEBRUARY**  
02-05

**The Search for Neutrinoless Double- $\beta$  Decay: Experimental and Theoretical Challenges**  
L. Coraggio, S. Pastore, M. Pavan, S. Schönert

**MARCH**  
02-06

**Glueballs and Charmonium: Lattice QCD, Experiment and Phenomenology**  
F. Knechtli, T. Korzec, M. Peardon

09-13

**Bridging TMD Frameworks: Intersections, Tensions, and Applications**  
G.A. Chirilli, A. Lelek, A. Vladimirov, P. Zurita

23-27

**The X17 Particle, Status and New Ideas**  
E. Filandri, L. Doria, C. Gustavino, M. Viviani

**MAR/APR**  
30-03

**Non-Perturbative Renormalization in Fundamental and Effective Theories**  
J. Gegelia, V. Cirigliano, E. Epelbaum, M. Schiffer, P. Shanahan

**APRIL**  
20-24

**The Sign Problem of Fermions: Computational Challenges and Emerging Approaches**  
T. Morresi, M. Casula, G. Garberoglio, S. Taioli, H. Xiong

**MAY**  
04-08

**Quantum Science Generation 2026**  
M.M. Wauters, A. Baldazzi, C. Capecchi, D. Pascual Solis, A. Windey

11-15

**Digital Twins for Nuclear and Particle Physics**  
A. Pilloni, M. Battaglieri, Y. Li

18-22

**Nuclear Theory for Astrophysics: Bridging Bound-State and Continuum Physics**  
P. Arthuis, F. Bonaiti, M. Heinz, G. Hupin, S. Pastore

**JUNE**  
15-19

**Hadron Imaging with GPDs: High-Precision Global Analysis and Lattice QCD**  
M. Constantinou, V. Braun, I. Cloët, R. Dupré, D. Richards

**JUNE/JULY**  
22-03

**Doctoral Training Program - Emerging Superconducting Technologies for Quantum Sensing and Computing**  
A. Giachero, E. Enrico, F. Mantegazzini, N. Roch, G.S. Paroanu

**JULY**  
06-10

**Responses of Strongly Interacting Systems from Femto to Astrophysical Scales**  
G. King, W. Jiang, A. Roggero, J. Sobczyk

**JULY**  
13-31

**Doctoral Training Program - Nuclear Theory for New Physics**  
V. Cirigliano, H. Hergert, E. Mereghetti, S. Pastore, M. Piarulli, A. Walker-Loud

**AUGUST**  
03 - 07

**From Nuclear Structure to New Physics**  
M. Gorshteyn, A. Glick-Magid, B. Ohayon, C.-Y. Seng

10 - 14

**Nuclear Physics under the Low-Energy, High-Intensity Frontier**  
C.-J. Yang, C. Bertulani, D. Maslarova, K. Spohr, P. Tomassini

**SEPTEMBER**  
07 - 11

**Bridging Machine Learning and Statistical Field Theory Through Generative and Diffusion Processes**  
L. Wang, G. Aarts, A. Athenodorou, M. Cheng

14-18

**The Physics and Chemistry of the Heaviest Elements**  
A. Diaz-Torres, C. Düllmann, S. Heinz, M. Kowal, G. Scamps

21-25

**The Interplay of Magnetic Fields, Nuclear Physics, and Nucleosynthesis in Neutron-Star Mergers and Supernovae**  
P. Mösta, A. Arcones, S. Curtis, E. O'Connor

**SEP/OCT**  
28-02

**Relativistic Fermions in Flatland: from Moiré Materials to Gauge Field Theories**  
S. Hands, H. Gies, J. Gracey, I. Herbut, E. Huffman, L. Janssen

**OCTOBER**  
05-09

**Many-Body Quantum Magic**  
C. Robin, T. Haug, M. Savage, E. Tirrito, X. Turkishi

12-16

**New Frontiers in Exotic Atoms: High-Precision Tests of QCD and QED and Probes of Beyond Standard Model Physics**  
C. Curceanu, M. Hori, P. Indelicato, A. Scordo, A.W. Thomas

19-23

**Theoretical Motivations and Empirical Evidence for Diquark Correlations in Hadrons**  
Z.-Q. Yao, T. Mineeva, C. Roberts, B. Wojtsekhowski

**NOVEMBER**  
09-13

**Quark-Gluon Dynamics in the Nuclear Medium**  
M. Sargsian, C. Keppel, F. Olness, M. Rinaldi, H. Szumila-Vance

## Supporting institutions/projects



Trento Institute for Fundamental Physics and Applications

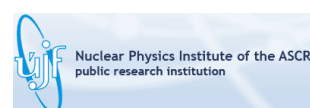
Gefördert durch:



IN2P3  
Les deux infinis



Science and Technology Facilities Council



FACILITY FOR RARE ISOTOPE BEAMS



For information: [staff@ectstaff.eu](mailto:staff@ectstaff.eu) | [www.ectstar.eu](http://www.ectstar.eu)

