15th LASNPA - Latin American Symposium on Nuclear Physics and Applications

Monday, December 7, 2026 - Thursday, December 10, 2026

IPEN

Scientific Program

Applications of Nuclear Techniques

Applications of Nuclear Techniques
Dedicated to the practical use of nuclear physics in diverse fields, this track highlights techniques such as Ion Beam Analysis (IBA), neutron scattering, and radioactive tracing. Submissions are encouraged in areas including materials science, environmental monitoring, archaeology (cultural heritage), and industrial applications.

Fundamental Symmetries and Neutrinos

Fundamental Symmetries and Neutrinos
This track welcomes submissions on tests of discrete symmetries (C, P, T, CP) and precision measurements probing physics beyond the Standard Model. Key topics include neutrinoless double beta decay ($0\nu\beta\beta$), fundamental neutrino interactions, electric dipole moments (EDMs), and dark matter searches using nuclear probes.

Hadronic Physics

Hadronic Physics and Phenomenology
Focusing on the strong interaction and the structure of hadrons, this track welcomes submissions on QCD, hadron spectroscopy, nucleon structure, and effective field theories. It covers theoretical models, computational approaches, and phenomenological frameworks designed to connect fundamental particle theories with experimental measurements in hadronic matter.

Nuclear Astrophysics

Nuclear Astrophysics
This track covers nucleosynthesis, stellar evolution, and the properties of dense matter in compact objects. Submissions on direct and indirect measurements of astrophysical reaction rates, the nuclear Equation of State, and applications to multi-messenger astronomy are highly encouraged.

Nuclear Education and Outreach

Nuclear Education and Outreach
This track is dedicated to the dissemination of nuclear science to students and the general public. It covers innovative teaching methods, curriculum development, science communication strategies, and public engagement initiatives. Submissions should focus on promoting scientific literacy and inspiring the next generation of nuclear scientists.

Nuclear Medicine

Nuclear Medicine
Focusing on the intersection of nuclear physics and healthcare, this track covers the production and application of radioisotopes for diagnosis and therapy. It includes research on radiopharmaceuticals, PET/SPECT imaging, dosimetry, and advanced radiotherapy techniques,

highlighting how nuclear physics improves medical outcomes.

Nuclear Instrumentation

Nuclear Instrumentation
This track covers the development and optimization of tools for nuclear research. Topics include advanced radiation detectors, signal processing electronics, data acquisition systems, and target preparation. It emphasizes innovations in detector technology and the instrumentation required for next-generation nuclear physics facilities.

Nuclear Structure & Reactions

This track welcomes:
theoretical and experimental research on the fundamental properties, structure, and decay of atomic nuclei. This track also covers all aspects of nuclear reaction dynamics, including heavy-ion collisions, fusion, fission, and recent advances in radioactive ion beam physics.

Relativistic heavy ion collisions

Relativistic heavy ion collisions
This track focuses on the study of nuclear matter under extreme conditions of temperature and density. It covers experimental and theoretical research on high-energy collisions, the formation and properties of the Quark-Gluon Plasma (QGP), collective flow, and jet quenching, primarily utilizing facilities like RHIC and the LHC.