

Session Program

30 July 2026 to 5 August 2026

43rd International Conference on High Energy Physics

New Developments in Quantum Field Theory, String Theory and Quantum Information in HEP

Natal Convention Center
Via Costeira Sen. Dinarte Medeiros Mariz, 6664-6704 - Ponta Negra, Natal - RN, 59090-002

Thursday 30 July

14:30

New Developments in Quantum Field Theory, String Theory and Quantum Information in HEP

Session |

Location: Praiamar Natal Hotel & Convention, Room #7, R. Francisco Gurgel, 33 - Ponta Negra, Natal - RN, 59090-050

14:30–14:45

New method of quantization for gauge theories with dependent generators

Speaker

Prof. Ioseph Buchbinder

14:45–15:00

Feynman Integrals from First Principles: Positivity, Analyticity, and Padé Approximants

Speaker

Johannes Henn

15:00–15:15

Generalized Mandelstam-Leibbrandt regularization

Speaker

Prof. Jorge Alfaro

15:15–15:30

New results for the 4-loop massive cusp anomalous dimension

Speaker

Prof. Nikolaos Kidonakis

15:30–15:45

Bootstrapping M-theory

Speaker

Andrea Guerrieri

15:45–16:00

Bounds on pion-nucleon scattering from the S-matrix bootstrap

Speaker

Prof. Denis Karateev

16:00–16:15

BRST-related symmetries and Gribov ambiguities in the FLPR model

Speaker

Ronaldo Thibes

16:15

16:45

New Developments in Quantum Field Theory, String Theory and Quantum Information in HEP

Session |

Location: Praiamar Natal Hotel & Convention, Room #7, R. Francisco Gurgel, 33 - Ponta Negra, Natal - RN, 59090-050

16:45–17:00

The QCD world-sheet axion

Speaker

Andreas Athenodorou

17:00–17:15

Probing Lambda-Lambda-Gravity with Bose-Einstein Condensate

Speaker
Prof. Alexander Belyaev

17:15–17:30 **Structure of cosmic strings for a gauged B-L symmetry**

Speaker
Wolfgang Bietenholz

17:30–17:45

Quantum interference from chemical potential in an out-of-equilibrium system

Speaker
Sebastian Mendizabal

17:45–18:00 **Parton Distribution Function from Minimum Free Energy Principle**

Speaker
Pouya Asadi

18:00–18:15

The Static Heavy Quark-Antiquark Potential within String Theory in Arbitrary Stationary Backgrounds

Speaker
Nikita TsegeInik

18:15