

**Session Program**

**14-18 Nov 2022**

**XIV Latin American Symposium on High  
Energy Physics**

***Pizza and poster session***

# Tuesday 15 November

16:30

## Pizza and poster session

**Session** | **Location:** USFQ main campus, Tesorería Hall

16:30-18:30

**LAGO studies to detect Gamma-Ray Burst and High Energy Astrophysics sources using water Cherenkov detector arrays**

**Speaker**

Luis Otiniano

16:30-18:30

**Model-independent radiative corrections to particle decay  $\Omega \rightarrow \Xi^0 + \bar{\nu}_e + e^-$**

**Speaker**

Marco Antonio Pulido Solis

16:30-18:30

**Machine learning applied to particle classification in LAGO Water Cherenkov Detectors**

**Speaker**

Luis Otiniano

16:30-18:30

**Anomaly-free abelian gauge symmetries with neutrino mass models**

**Speaker**

KIMY JOHANA AGUDELO JARAMILLO

16:30-18:30

**A New Method for noise rejection in the Water Cherenkov Detectors of the LAGO project through Muon Decay measurement**

**Speaker**

CESAR M. CASTROMONTE FLORES

16:30-18:30

**On the viability of a light scalar spectrum for 3-3-1 models**

**Speaker**

Adriano Cherchiglia

16:30-18:30

**Estimation of the Electron Shaking Probability of Low-Energy  $^7\text{Be}$  Decay Spectra in Superconducting Quantum Sensors for the BeEST Sterile Neutrino Search Experiment**

**Speaker**

Sergio Oscar Nuñez Silva

16:30-18:30

**Construction of a traversable wormhole from a suitable embedding function**

**Speaker**

Alejandro Rueda

16:30-18:30

**An analysis of the Ruppeiner geometry and the thermodynamics of extremal black holes****Speaker**

Pedro Zottolo

16:30-18:30

**Calculation of masses and amplitudes of pseudoscalar mesons****Speaker**

Ruben Hernando Criollo Estrella

16:30-18:30

**Testing the feasibility to measure acausally wrong displaced vertices from Lee-Wick particle decays with CMS experiment open data****Speaker**

Jonathan Sanchez

16:30-18:30

**Modified Pati-Salam model for flavor anomalies****Speaker**

Oscar Rosero

16:30-18:30

**Response of a modular scintillation detector to a secondary cosmic ray muon flux****Speaker**

Luis Otiniano

16:30-18:30

**Faddeev-Jakiw Formulation to Schwinger Model on the Null-Plane****Speaker**

Dr German Ramos Zambrano

16:30-18:30

**Five texture zeros in the lepton sector and neutrino oscillations at DUNE****Speaker**

Richard Benavides

16:30-18:30

**Seeking  $SU(3)_c \otimes SU(3)_L \otimes U(1)_X$  models without exotic electrical charges****Speaker**

Prof. Yithsbey Giraldo Úsuga

16:30-18:30

**The Ecuadorian experience with the CMS open data initiative and future projects****Speakers**

Daniela Merizalde Aguirre, Jose David Ochoa Flores, Luis Andres Chicaiza Chuquitarco, Pamela Llerena Delgado

16:30-18:30

**Machine Learning Techniques and Algorithms used in HEP****Speaker**

Xavier Tintin

18:30