

Session Program

14-18 Nov 2022

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

Parallel session A

Monday 14 November

14:45

Parallel session A

Session | **Location:** USFQ main campus, Calderón de la Barca theater | **Convener:** Melissa María Cruz Torres

14:45–15:00

Leptonic CP violation from a vector-like lepton

Speaker

Adriano Cherchiglia

15:00–15:15

B-meson anomalies and the Triplet vector boson model.

Speaker

Eduardo Rojas

15:15–15:30

A highlight of multiboson interactions, their polarization and photon-induced access to tau g-2 at ATLAS

Speaker

Prachi Atmasiddha

15:30–15:45

Recent searches for new phenomena with the ATLAS detector

Speaker

Sebastien Rettie

15:45–16:00

ATLAS searches for supersymmetry with long-lived particles

Speaker

Risa Ushioda

16:00

16:30

Parallel session A

Session | **Location:** USFQ main campus, Calderón de la Barca theater | **Convener:** Eduardo Rojas

16:30–16:45

Magnetic Monopoles and Monopolium in pp Collisions

Speaker

Maria Beatriz De Leone Gay

16:45–17:00

DNNs and Jet Substructure for Improved Double-Higgs Searches at the HL-LHC and Beyond

Speaker

Santiago Rafael Paredes Saenz

17:00–17:15

Improving Signal Significance of SUSY Compressed Scenarios by Machine Learning Algorithms

Speaker

Jorge Fernando Fraga Flores

17:15–17:30

Fermionic dark matter in a Left-Right Model with mirror fermions

Speaker

Dr Mario Lamprea

17:30

Tuesday 15 November

14:45

Parallel session A

Session | **Location:** USFQ main campus, Calderón de la Barca theater | **Convener:** José Bazo

14:45–15:00

Neutron Inelastic Cross Section Measurement on Argon with ProtoDUNE Single-Phase

Speaker

David Orlando Rivera Jr

15:00–15:15

Status and perspectives of the CONNIE experiment

Speaker

Irina Nasteva

15:15–15:30

Effective Dirac neutrino masses in local Abelian symmetries

Speaker

DIEGO ALEJANDRO RESTREPO QUINTERO

15:30–15:45

Assessment of the dimension-5 seesaw portal and impact of exotic Higgs decays on non-pointing photon searches

Speaker

Dr Joel Jones-Perez

15:45–16:00

Oscillation tomography study of Earth's composition with atmospheric neutrinos

Speaker

José Arnulfo Herrera Lara

16:00

Thursday 17 November

14:45

Parallel session A

Session | **Location:** USFQ main campus, Casa Blanca theater | **Convener:** Santiago Rafael Paredes Saenz

14:45–15:00

Probing the nature of electroweak symmetry breaking with Higgs boson pairs in ATLAS

Speaker

Dan Guest

15:00–15:15

Higgs boson property measurements at the ATLAS experiment

Speaker

Gabriel Facini

15:15–15:30

Measurements and searches for Higgs boson decays to bottom and charm quarks with the CMS Experiment

Speaker

Alejandro Gomez Espinosa

15:30–15:45

ATLAS searches for supersymmetry with prompt particles

Speaker

David Miller

15:45–16:00

Searching for new symmetries in the Higgs sector at ATLAS

Speaker

Adriana Milic

16:00

16:30

Parallel session A

Session | **Location:** USFQ main campus, Casa Blanca theater | **Convener:** Alejandro Gomez Espinosa

16:30–16:45

Quarkophobic W' for LHC searches

Speaker

Jose Ruiz

16:45–17:00

From initial gluon saturation to final state hadrons: quantum entanglement in particle collisions

Speaker

Rene Bellwied

17:00–17:15

The X17 boson anomaly: status and prospects

Speaker

Enrico Nardi

17:15