



# 8th LIP/IDPASC PhD Students Workshop

## Thursday, 17 October 2024

### Session 4: Group 8 - Auditório B1, Complexo Pedagógico 2 (11:30 - 12:15)

-Conveners: Sofia Andringa

time	[id] title	presenter
11:30	[33] Potential of Water-Cherenkov Air Shower Arrays for detecting transient sources of high-energy astrophysical neutrinos	SERRANO GONZÁLEZ, Borja
11:35	[34] Measurement of Collider Neutrinos with the SND@LHC Experiment	SOARES, Guilherme
11:40	[35] Search for Higgs Boson Pair Production through the Decay of Heavy Resonances in the $b\bar{b}\tau\tau$ final state with the CMS detector	WULFF, Johan
11:45	[36] Search for anomalous couplings in the HWW vertex with the ATLAS detector at the LHC. The Cesium source calibration and monitoring system of the ATLAS Tile Calorimeter.	KHOLODENKO, Marina
12:00	[37] Discussion	

### Session 4: Group 9 - Auditório B1, Complexo Pedagógico 2 (14:00 - 14:45)

-Conveners: Fernando Souza

time	[id] title	presenter
14:00	[51] Lepton Flavour Universality in top quark pair events in proton-proton collisions at $\sqrt{s} = 13$ TeV	DA MOLIN, Giacomo
14:05	[52] Measurement of W boson pair production in final state with an hadronically decaying tau lepton	BATTISTA MAROZZO, Giovanni
14:10	[53] Quantum Simulation of Scattering	TURCO, Matteo
14:15	[54] CP violation in the HWW interaction in WH production	BARRUÉ, Ricardo
14:20	[58] Probing the nature of the neutrino with large scale dark matter detectors3	JENKINS, Kai
14:25	[56] Discussion	

### Session 4: Group 10 - Auditório B1, Complexo Pedagógico 2 (14:45 - 15:30)

-Conveners: Fernando Souza

time	[id] title	presenter
14:45	[57] Asymmetries in invisible Dark Matter mediator production associated with $t\bar{t}$ final states	CHALBAUD, Esteban
14:50	[59] Investigating the Risk of Radiation-Induced Brain Necrosis Based on Ionization Detail (ID) Parameters in Proton Therapy for Skull Base Tumors	KATMEH, Khaled
14:55	[60] Searching for dark matter with the ATLAS detector using unconventional signatures	BARROS, Maura
15:00	[61] Constraining Multi-scalars models with colliders and Dark Matter	BOTO, Rafael
15:05	[55] Discrimination of Multiple Scatter BGs to enhance the sensitivity of the LZ Detector to $0\nu\nu\beta\beta$ decay	SALTÃO, Sandro

15:10	[62] Discussion	
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**Session 4: Group 11 - Auditório B1, Complexo Pedagógico 2 (15:30 - 16:15)**

**-Conveners: Fernando Souza**

time	[id] title	presenter
15:30	[63] Space Radiation in Low Earth Orbit and Space Weather on Board the Space Rider	FRANCISCO, Cristiana
15:35	[64] Length-Scalable Discharge Plasma Source for AWAKE	TORRADO, Nuno
15:40	[65] Modeling the radiobiological effect of radiation using spheroids as an in silico model	AZEVEDO, Tiago
15:45	[66] A Research Approach in Experimental Nanodosimetry for Radiotherapy and Beyond	MERZA, Victor
15:50	[67] Discussion	