8th LIP/IDPASC PhD Students Workshop

Wednesday, 16 October 2024 - Thursday, 17 October 2024 Braga



Book of Abstracts

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example

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Time-of-Flight technology implementation in the HadronPET for in-situ proton beam range monitoring

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Radiation Damage of Optical Components in ATLAS/LHC Tile Calorimeter

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Introduction

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The Stitching FLASH treatment planning method for proton FLASH radiotherapy: Combining FLASH with VMAT for brain irradiation

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R&D: New Plastic Scintillating Materials for Scintillator Calorimeters

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PicoMonitoring: sub-ns FLASH beam mo	nonitoring with S	i devices
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Heavy Baryon excitations using functional calculations with a quark-diquark model

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Exploring the conformal bootstrap at higher points

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Formal and phenomenological studies in the high energy of QCD

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Probing the Quark-Gluon Plasma with Heavy Flavour

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The potential benefits of proton therapy for neurodegenerative disorders

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Modelling of Prostate Cancer Progression: Integrating Tumor Growth and Angiogenesis

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Beyond the Barrier: exploring α -nuclear potentials with exotic heavy nuclei

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Parton Showers for Heavy Ion Collisions

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Using Machine Learning to Scan Beyond Standard Model Parameter Spaces

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Potential of Water-Cherenkov Air Shower Arrays for detecting transient sources of high-energy astrophysical neutrinos

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Measurement of Collider Neutrinos with the SND@LHC Experiment

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Search for Higgs Boson Pair Production through the Decay of Heavy Resonances in the bbtt final state with the CMS detector Corresponding Author: jwulff@lip.pt

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Towards precise in-medium parton showers for jet production

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Accelerating the ATLAS Trigger system with Graphical Processing Units

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Probing first interaction properties of ultra high energy cosmic rays by measuring the low muon number distribution tail using underground muon detectors

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Gamma/hadron discrimination at Ultra High Energies with the Southern Wide-field Gamma-ray Observatory

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Cosmic Rays: development of outreach modules through participatory design

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Sensitivity of a MARTA Station at the Pierre Auger Observatory to Extensive Air Shower Particle Energy Distributions

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Enhancing Pierre Auger Observatory's and SWGO's Detection Capabilities

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Lepton Flavour Universality in top quark pair events in protonproton collisions at $\sqrt{s} = 13 \text{ TeV}$

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CP violation in the HWW interaction in WH production

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Discrimination of Multiple Scatter BGs to enhance the sensitivity of the LZ Detector to 0 decay

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Asymmetries in invisible Dark Matter mediator production associated with tt~ final states

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Probing the nature of the neutrino with large scale dark matter detectors3

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Investigating the Risk of Radiation-Induced Brain Necrosis Based on Ionization Detail (ID) Parameters in Proton Therapy for Skull Base Tumors

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Searching for dark matter with the ATLAS detector using unconventional signatures

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Constraining Multi-scalars models with colliders and Dark Matter

Corresponding Author: rafael.boto@tecnico.ulisboa.pt **Session 4 / 62** Discussion **Session 4 / 63** Space Radiation in Low Earth Orbit and Space Weather on Board the Space Rider **Session 4 / 64** Length-Scalable Discharge Plasma Source for AWAKE Corresponding Author: nunoets@hotmail.com **Session 4 / 65** Modeling the radiobiological effect of radiation using spheroids as an in silico model **Session 4 / 66** A Research Approach in Experimental Nanodosimetry for Radiotherapy and Beyond

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