



# The 3rd African Conference on Fundamental and Applied Physics (ACP2023)

## Monday 25 September 2023

### Parallel Session 1: Heavy Ion/ Particle Physics - Regency Room (16:00 - 17:30)

-Conveners: Benard Mulilo; William Horowitz

time	[id] title	presenter
16:00	[230] Measurements of heavy-flavour production in pp collisions at $\sqrt{s} = 13$ TeV with the ALICE detector	SHABA, Tebogo Joyce
16:15	[72] A Light shed on Lepton Flavor Universality in B meson decays	Dr PATNAIK, Sonali
16:30	[173] Measurement of the Energy Response of the ATLAS Calorimeter to Charged Pions from tau-lepton Decays in Run 2 Data	NOURY, Meryem
16:45	[102] Search for axions in $H \rightarrow aa \rightarrow 4\gamma$ decays at the LHC's ATLAS experiment	Ms IMAM, Hajar
17:00	[109] LA-CoNGA physics: an open science education collaboration between Latin America and Europe for High Energy Physics	CAMACHO TORO, Reina Coromoto
17:15	[190] Measurement of the electroweak cross-section for a same-sign W boson pair produced in association with two jets using 139/fb of ATLAS data	MWEWA, Chilufya

# Wednesday 27 September 2023

## Parallel Session 1: Computing/ Nuclear Physics - Regency Room (16:00 - 18:00)

-Conveners: Mlungisi Nkosi; Tshiamo Motshegwa

time	[id] title	presenter
16:00	[77] Investigating octupole correlations in Xe nuclei with mass $A < 120$	CHAMOLI, Sanjay Kumar
16:15	[114] Enhancing Reactor Performance: Computational Study on Optimizing Beryllium Shim Plates in the Nigerian Research Reactor-1	SOLOMON, Dennis
16:30	[118] Isospin breaking in the upper fp-shell nuclei	ZIMBA, George Lowani
16:45	[150] Use of a High Resolution $\Delta E$ -E Gas-Ionisation Detector for the $6\text{Li} + 10\text{B}$ System at ELAB = 20 MeV	Dr OGANA JOHN, Samuel Odumu
17:00	[179] Indoor exposure prediction through Monte Carlo Simulation Geant4 : Case of primary schools of the Doukkala-Abda Region	Ms ETTOUFI, Asmae
17:15	[34] Indoor radon and ambient equivalent dose measurements using a locally manufactured low-cost smart electronic device and validation with reference instruments	Dr JACOB, Mbarndouka Taamté

# Thursday 28 September 2023

## **Parallel Session 1: Materials Physics/ Medical Physics/ Computing - Regency Room (16:00 - 17:30)**

**-Conveners: David Levitt; Lalla Btissam Drissi**

time	[id] title	presenter
16:00	[145] Electronic and magnetic properties of Selected TM doped MoS <sub>2</sub> monolayer: A DFT calculation	ABAVARE, Eric K. K.
16:15	[153] Enhanced removal of Methyl red dye from aqueous solutions using Zirconium oxide impregnated Royal palm fiber Activated carbon (ZrO <sub>2</sub> -RPAC)	Dr DANU, Bernice Yram
16:30	[178] High-quality Chemical Vapour Deposition (CVD) produced graphene.	CHAUKE, Hleko
16:45	[23] Performance of a Bifacial Solar Module Under Different Backgrounds	Ms KATUNGE, Gloria
17:00	[5] Assessment of cystamine's radioprotective ability under high dose-rate irradiation: a Monte Carlo multi-track chemistry simulation study	Mr SAMAFU, Penabei
17:15	[127] Computational fluid dynamics modelling of the infectiousness of airborne droplets.	Dr RALIJAONA, Mbolahasina