

SAIP2023

Thursday 06 July 2023

Poster Session 2 (15:40-17:40)

[id] title	presenter	board
[367] Signatures of possible trinni event during quiet geomagnetic conditions	MTUMELA, Zolile	
[357] Opto-functional characteristics of merit in graphene oxide and reduced graphene oxide from synthetic graphite feedstock for potential incorporation in thin film organic solar cells	Ms THEKHWE, Marry	
[6] Probing Axion-Like Particles at LHC	Mr MOSALA, Karabo	
[8] Design and Fabrication of a Plastic Biogas Digester for the Production of Biogas from Cow Dung	OBILEKE, KeChrist	
[10] Optimization of the Performances of a Silicon Solar cell using a Non-uniform Doping Distribution	Dr ABRAHAM DIMITRI, Kapim Kenfack	
[24] Effect of polymer coating on the calcium ferrite nanoparticles for biomedical applications	Dr MDLALOSE, Wendy	
[44] Performance of the special C10 cells of the Tile Calorimeter of the ATLAS detector during Run 2 data taking period	RAPHEEHA, Phuti Ntsoko	
[45] Study of the Performance of Blended Mixtures of Henna and Black Plum Plants as a Co-Sensitizer in Dye-Sensitized Solar Cells (DSSCs)	Mr DAUDA , Adekunle	
[53] The use of Machine learning to improve quality control in electronics for CERN.	PHADAGI, Khathutshelo	
[65] Molecular dynamics studies of the transfer of protons in multi-walled carbon nanotube poly(2,5)benzimidazole composites	VAN NIEKERK, Salomon	
[68] RESISTIVE SWITCHING IN AG/CS+PVP+CDTE/CDSE/ITO-PET DEVICE FOR APPLICATION IN ECO-FRIENDLY MEMORY DEVICE	Ms GIBA, Khanya	
[69] Structural and Vibrational Studies of TbMn2O5 Powder	MWENDWA, Geoffrey	
[77] GAMMA COMPUTED LAMINOGRAPHY: A TROUBLESHOOTING TOOL FOR DISTILLATION COLUMNS	CHIRUME, Witness	
[97] Resistive Switching property of Cow Milk dispersed with Selenium particles.	Mr NTSHAKAZA, Sonwabile	
[120] The Shape of ^{36}Ar in its first 2 plus state	RADEBE, Ntokozo	
[143] POLARIS PEPT for Proton Beam Tracking	ROUX, Alice	
[145] Developing the Temperature Mapping Plugin of the Tile Calorimeter of the ATLAS Detector within Tile-in-One	Mr PHAKATHI, Lungisani Siphon	
[147] Theory and Phenomenology of Relativistic Heavy-Ion Collisions	MOENG, Amogelang	
[150] ROLE OF NUCLEAR INTERACTIONS ON THE GROUND-STATE STRUCTURE OF HELIUM-6 THREE-BODY SYSTEM	Mr MAHATIKELE, Mahabe	
[158] Performance Operation of a Greenhouse Biogas Digester	MZOBOTSHE, Mandilakhe	
[160] Geant4 simulation for detector development and PET imaging	Mr BHENGU, Busani	

[161] Development of a nonlinear response surface model to predict the volume of biogas yield of a fixed dome digester charged with cow manure	Mr MZOBOTSHE, Mandilakhe	
[175] Ion-induced radiation damage in Lutetium-Aluminium and Gold using SRIM-2013	Mr TEMAUGEE, Samuel Terungwa	
[179] Density functional theory study of transitional metal doped ZnO nanostructures for gas sensing: Interaction of NH ₃ and NO ₂ with the doped ZnO surface	DIMA, Ratshilumela Steve	
[191] Configuration of power chips for the TileCoM for Phase-II Upgrades at CERN.	GOLOLO, Mpho Gift Doctor	
[193] Kernel density estimation and weakly supervised machine learning-based models for Higgs-like signals data classification	TRIPATHI, Nidhi	
[194] Gas sensing mechanism of Ethylene on pure Co ₃ O ₄ (311) surface: Density Functional Theory Study	Ms LETSOALO, Modjadji Rebecca	
[199] Numerical study of a metallic fluid flow in a magnetohydrodynamic pump	MAKAN, neeta	
[200] Comparative performance analysis for optimally designed on-grid and off-grid hybrid power systems for a Limpopo, South Africa Community Development Centre energy system	MURONGA, Shandukani	
[205] Characterization of Natural Polymeric Fibres with Resonance Acoustic Spectroscopy	LARA, Sekhants'o	
[207] Using NLP to predict Alert Signals from the ATLAS TileCal Detector Control System at CERN	PERIKLI, Nicholas	
[208] Mechanism of lithium and magnesium oxides (Li _x O _x and Mg _x O _x) adsorption onto pristine graphene: Density functional theory approach	Mr MATLOGA, M	
[214] Measurement and simulation of secondary neutron production from a 66 MeV proton beam	Mr DE KLERK, Josiah	
[216] Influence of pyrolysis temperature on the mesoporous graphitic carbon nitride and its effect on physicochemical properties for energy application.	Ms MODUNGWE, Tshegofatso Memory	
[230] Performance evaluation of a 5kWp photovoltaic system in the Eastern Cape	MHUNDWA, Russel	
[239] Novel thermally reduce graphene oxide microsupercapacitor fabricated via mask-free axi-draw direct writing	MAPHIRI, Vusani Muswa	
[240] Adsorption of H ₂ S on La-ZnO Surface Using DFT+U Method	SHANDUKANI, kharavho Ms LETSOALO, Modjadji Rebecca	
[245] First-Principles Study of sodium De-intercalation From Tri-Chalcogenide NaNbSe ₂	SANA, Sana RANWAHA, Tshifhiwa Steven	
[246] Control and monitor the operation of PVWPS using the OVH SCADA-based system	Mr MASEVHE, Livhuwani	
[255] Analysis of calculated and measured entrance skin dose of common radiographic procedures.	Dr FAITH, Ochai-Ejeh	
[258] The Use of a Burn-in Station for Stress-Testing of the LVPS back-end electronics for the Tile Calorimeter	WILKINSON, Tristan Jade	
[260] The role of Physics in sustainable development	Mr GUGA, Aluwani Mr OGUNDIPE, Sunday Ms MDLATU, Yondela	

[262] Towards a Century of Physics in South Africa: Achievements and Advances	Mr GUGA, Aluwani Mr MURONGA , Shandukani Mr OGUNDIPE, Sunday	
[275] Quantum state inference from coarse-grained descriptions: analysis and an application to quantum thermodynamics	CONCHA OBANDO, Paola	
[290] Sinc related Basis functions with predetermined nodes	Mrs EZENWACHUKWU, Obiageli Lovenda	
[292] Exploring the spectroscopy of the low and medium spin states in ^{148}Sm Nucleus.	ZUMA, Mfundo	
[300] Search for a Higgs boson decaying to a four lepton plus missing transverse energy final state via four vector bosons	MAPEKULA, Xola	
[303] Phase characterisation of a deformable mirror through digital Stokes polarimetry	MKHUMBUZA, Light	
[304] The study of the properties of Titanium based alloys for biomedical applications using the First Principle' approach.	MABEBA, Kobe	
[305] The study of Zr and Nb alloyed on the beta-Ti for bio-medical applications: first principle approach.	MATHEWS, Thabiso	
[307] Linking Quantum Search Algorithms to Ghost Imaging	GOUNDEN, Neelan	
[311] Fitting NOvA and T2K data with the revamped S_{A_4} symmetry model for the poorly constrained neutrino oscillation parameters	MSIZA, Thabo	
[315] Exploring dark $Z_{\{d\}}$ -boson at LHC	Mr MOSALA, Karabo	
[324] Achieving reliable and robust optical communication through a change of basis	PETERS, Cade Ribeiro	
[328] Comparison of Al_2O_3 and Fe_2O_3 surfaces using First Principle method	DIBAKWANA, Patricia	
[104] Tailoring vanadium pentoxide (V_2O_5) nanostructure properties to selective detection of nitrogen dioxide (NO_2).	Mr SIFUNDA, Vuyani	
[339] Design of a PV power system for grid-connected Facilities energy retrofitting: A case study of 15 SAI Battalion, Limpopo Province in South Africa	Dr MULAUDZI, Sophie	
[348] Simulating the position sensitivity of a large-volume segmented germanium clover detector	NONCOLELA, Sive	
[211] Low-budget atmospheric monitoring system.	Dr MARIOLA, Marco	
[196] Setting up an environment for extracting and analyzing data from the DCS ATLAS experiment for the behavior of High Voltage channels	GUMEDE, Sanele Scelo	