



# The Scientific Program of ACP2021

## Monday, 7 March 2022

### Parallel Session 2: Particle Physics (1) (14:30 - 16:00)

-Conveners: Ulrich Goerlach

time	[id] title	presenter
14:30	[141] Search of new resonances decaying into top quark pairs in the lepton+jet final state in proton-proton collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector	NGAIR, Badr-Eddine
14:48	[138] A High-Granularity Timing Detector (HGTD) in ATLAS Phase-II Upgrade: Physics and performance with HGTD	BENDEBBA, Fatima
15:06	[143] Search for invisible Higgs bosons produced via vector boson fusion (VBF) at the LHC using the ATLAS detector	ZAAZOUA, Mohamed
15:24	[139] Minimum bias simulation of parasitic collisions	EZZARQTOUNI, Sanae
15:43	[154] Light charged Higgs boson decays to a $W^{\pm}$ and a BSM Higgs boson at the LHC	KRAB, Mohamed

## Tuesday, 8 March 2022

### Parallel Session 2: Particle Physics (2) (14:30 - 15:30)

-Conveners: Ulrich Goerlach

time	[id] title	presenter
14:30	[150] Extended Higgs sector of 2HDM with real triplet : Theoretical and phenomenological studies at the LHC	AIT OUAZGHOOR, BRAHIM
14:45	[152] 3-Dimensional BF Theory On Seifert Fibered Manifolds	KAKONA, Tony Mbambu
15:00	[151] Measurement of azimuthal angular correlations of D mesons with charged particles in pp collisions at $\sqrt{s} = 13$ TeV with ALICE at the LHC	NAIK, Bharati
15:15	[153] Multiplicity dependence of heavy-flavour production in small systems in ALICE	MHLANGA, Sibaliso

### Parallel Session 2: Earth Physics (15:30 - 16:00)

-Conveners: Bjorn von der Heyden

time	[id] title	presenter
15:30	[165] Natural Radionuclides assay in Nigerian Granite Rocks	OLARINOYE, Oyeleke
15:45	[166] VERTICAL ELECTRICAL SOUNDING AND PHYSICO-CHEMICAL ANALYSIS OF GROUNDWATER AND SOIL SAMPLES IN THE VICINITY OF MUNICIPAL SOLID WASTE IN KONTAGORA, NIGER STATE	RAFIU, Adewuyi Abdulwaheed

# Thursday, 10 March 2022

## **Parallel Session 2: Nuclear Physics (14:00 - 15:00)**

-Conveners: Mark Dalton

time	[id] title	presenter
14:00	[157] D-meson Suppression and Azimuthal Anisotropy in a Strongly Coupled Plasma at $\sqrt{s_{NN}}=5.5$ TeV with Comparison to LHC Measurements	NGWENYA, Blessed Arthur
14:15	[158] On the DDM and ML quantum concepts in nuclear shape phase transitions of atomic nuclei	EL BATOUL, Abdelwahed
14:30	[159] Using Microphotonic Nuclear Forensics to Mediate Nuclear Security and Nuclear Safety	ANGEYO KALAMBUKA, HUDSON
14:45	[160] Soil gas radon, indoor radon and its diurnal variation in Northern region of Cameroon	SADJO, Sadjo

## **Parallel Session 2: Particle Physics (3) (15:00 - 15:15)**

time	[id] title	presenter
15:00	[220] Laser-assisted high-energy processes	JAKHA, Mohammed

## **Parallel Session 2: Earth Physics (15:15 - 15:30)**

-Conveners: Alassane TRAORE

time	[id] title	presenter
15:15	[164] Investigation of Subsurface Structures within Bosso Local Government for Groundwater Exploration Using Magnetic and Resistivity Data	ABBASS ADEBAYO, ADETONA