



# First Pan-African Astro-Particle and Collider Physics Workshop

## Wednesday 23 March 2022

### Parallel Session V, Collider - Experiment (14:00-18:25)

-Conveners: Nadir Hashim; Shima AbuZeid

| time  | [id] title  | presenter                                      |
|-------|---|--|
| 14:00 | [29] Search for Higgs boson pair production in the two bottom quarks plus two photons final state in $pp$ collisions at $\sqrt{s} = 13$ TeV with the ATLAS detector | BELFKIR, Mohamed                               |
| 14:15 | [49] Higgs CP measurement with EFT model in lepton collider   | SHA, qiyu                                      |
| 14:30 | [39] Dark photon searches with the ATLAS detector at the LHC  | EL JARRARI, Hassnae                            |
| 14:45 | [80] CP-even Heavy Higgs boson at HL-LHC  | Ms BESHAR, Aya I.                              |
| 15:00 | [76] Charged Higgs boson production via $pp \rightarrow H \pm b_j$ at the LHC   | OUCHEMHOU, Mohamed                             |
| 15:15 | [66] The off-shell Higgs production and measurement of its decay width with the ATLAS experiment  | Mr MOHAMMED, Abdualazem                        |
| 15:30 | [47] Minimum bias simulation of parasitic collisions  | EZZARQTOUNI, Sanae<br>Prof. BENCHEKROUN, Driss |
| 15:45 | Coffee Break  |  |
| 16:15 | [60] The Spin Physics Detector at NICA  | Dr EL-KHOLY, Reham                             |
| 16:30 | [82] Higgs boson couplings at muon collider   | BUONINCONTRI, Laura                            |
| 16:45 | [19] The search for resonances with topological requirements with the $Z\gamma$ final state at the LHC  | CHOMA, Nalamotse Joshua                        |
| 17:00 | [16] The Use of a Variational Autoencoder in the Search for Resonances at the LHC   | STEVENSON, Finn                                |
| 17:15 | [13] Searches for heavy scalar resonance through hadronic jet reconstruction at electron-proton colliders   | MALWA, Elias                                   |
| 17:30 | [6] The use of GANs in the search for new resonances at the LHC using semi-supervised machine learning techniques   | LIEBERMAN, Benjamin                            |
| 17:45 | [15] Search for Higgs boson pair production in the $bbWW^*$ channel with the ATLAS detector   | HIDAOU, Mourad                                 |