

Session Program

29-31 Jan 2020

HEPP2020

Session IV

University of Venda
Senate Chamber P/Bag X 5050 Thohoyandou, 0950

Thursday 30 January

14:00

Session IV: Session IV

Session | **Location:** University of Venda, Senate Chamber P/Bag X 5050 Thohoyandou, 0950 | **Convener:** Xifeng Ruan

14:00-14:20 **BSM searches using SM measurements!**

Speaker

Deepak Kar

14:20-14:35

Implementing a robust anti-QCD tagger with mass de-correlated jet image data

Speaker

Mr Kokotla Rapetsoa

14:35-14:50

Application of a novel Machine Learning approach for the search of heavy resonances with topological features at the LHC

Speaker

Salah-Eddine Dahbi

14:50-15:05

Testing the search for new resonances in the di-photon channel with topological requirements on the production of the Standard Model Higgs boson at the LHC

Speaker

Mr Nalamotse Joshua Choma

15:05-15:20

An Alternative to Monte Carlo Generators with Deep Generative Models

Speaker

Mr Thabang Lebese

15:20-15:35

Applications of Weakly-Supervised Machine Learning Techniques in the Search for New Bosons Focusing on Dilepton Final States at the ATLAS Experiment.

Speaker

Mr Benjamin Lieberman

15:35-16:05

Tea/Coffee

16:05-16:20

Searching for heavy scalar resonances in the LHC run 2 dataset in the $Z\gamma$ final states using machine learning techniques.

Speaker

Ntsoko Phuti Rapheeha

16:20-16:35

Application of Machine Learning to satellite data

Speaker

Mr Ayanda Thwala

16:35-16:50

Search for a resonance decaying into two photons in association with $b\bar{b}$ jets

Speaker

Esra Mohammed Shrif

16:50-17:05

Background determination of the control region of the $R \rightarrow SH \rightarrow 4\ell + E^{\text{miss}}_{\text{T}}$ signal at the ATLAS detector

Speaker

Mr Abdualazem Fadol Mohammed

17:35