

## Agenda of Kruger2022

### Morning December 5<sup>th</sup>

10:00 – 13:30

10:00 – 11:00 Opening session, Chair, Department of Science and Innovation and the National Research Foundation

11:00 – 12:00 Federico Antinori, The ALICE experiment: probing QCD matter at the LHC (50+10)

12:00 – 12:30 Tea Break

12:30 – 13:30 Tobias Hurth, Lepton Flavor anomalies (50+10)

13:30 – 14:30 Lunch

### Afternoon December 5<sup>th</sup>

14:30 – 18:20

14:30 – 14:55 Pierluigi Bortignon, Higgs measurements at CMS: Highlights and prospects (20+5)

14:55 – 15:20 Chiara Oppedisano, Characterization of particle production through UE and very forward energy in hadronic collisions (20+5)

15:20 – 15:45 Helena Santos, Recent results from heavy ion collisions with ATLAS (20+5)

15:45 – 16:10 George Iakovidis, Higgs boson property measurement at the ATLAS experiment (20+5)

16:10 – 16:40 Tea Break

16:40 – 17:05 Riccardo Salvatico, SM measurements at CMS : Status and Highlights (20+5)

17:05 – 17:30 Michaela Mlynarikova, Performance and calibration of the ATLAS Tile Calorimeter (20+5)

17:30 – 17:55 Shreyasi Acharya, Heavy flavour production measurements in ALICE (20+5)

17:55 – 18:20 Yuri Davydov, Radiation studies for the upgrade of the ATLAS detector (20+5)

Morning December 6<sup>th</sup>

10:00 – 13:30

10:00 – 11:00 Greg Landsberg, Searches for BSM particles including BSM Higgs (50+10)

11:00 – 12:00 Chris Hays, W mass measurement (50+10)

12:00 – 12:30 Tea Break

12:30 – 13:30 Jochen Klein, ALICE upgrades and perspectives for heavy-ion physics at the LHC (50+10)

13:30 – 14:30 Lunch

Afternoon December 6<sup>th</sup>

14:30 – 18:20

14:30 – 14:55 Matěj VACULČIAK, Role of rapidity choice for the Balitsky-Kovchegov equation (20+5)

14:55 – 15:20 Eric Chabert, BSM searches at CMS: Highlights and prospects (20+5)

15:20 – 15:45 Anna, Chrysostoumou, Extra-dimensional theory and phenomenology in the era of gravitational waves (20+5)

15:45 – 16:10 Henrik Wilkens, Upgrade of the ATLAS Hadronic Tile Calorimeter for the High Luminosity LHC (20+5)

16:10 – 16:40 Tea Break

16:40 – 17:05 Alexey Zhemchugov, Spin Physics Detector at NICA (20+5)

17:05 – 17:30 Othman Mouane, Heat dissipation Improvement of ATLAS Detector Electronics by Thermal Interface Materials based on Carbon Nanomaterials (20+5)

17:30 – 17:55 Humphry Tlou, Operation and performance of the ATLAS TileCal ALTI system and test-beam results (20+5)

17:55 – 18.20 Benjamin Lieberman, Frequentist approach to quantify fake signals when using semi-supervised machine learning classifiers (20+5)

Morning December 7<sup>th</sup>

10:00 – 13:30

10:00 – 11:00 Peter Braun-Munzinger, Hadronization of the QGP (50+10)

11:00 – 12:00 Mohamed Zaazoua, Recent searches for new phenomena with the ATLAS detector (50+10)

12:00 – 12:30 Tea Break

12:30 – 13:30 Jin Wang, Future Colliders (50+10)

13:30 – 14:30 Lunch

Afternoon December 7<sup>th</sup>

14:30 – 18:20

14:30 – 14:55 Ethan Lewis Simpson, Probing the SM and beyond with top quarks, jets and photons in the ATLAS experiment (20+5)

14:55 – 15:20 Phuti Rapheeha, The response of gap and crack scintillators of the Tile Calorimeter of the ATLAS detector to isolated muons from proton-proton collisions (20+5)

15:20 – 15:45 Andrea Coccaro, Searches for BSM physics using challenging and long-lived signatures with the ATLAS detector (20+5)

15:45 – 16:10 Anza-Tshilidzi Mulaudzi, An alternative explanation of the multi-lepton anomalies at the LHC (20+5)

16:10 – 16:40 Tea Break

16:40 – 17:05 Finn Stevenson, The Assessment of Different VAE derivatives for Data Generation and Event Classification in Zγ Final State Background Data (20+5)

17:05 – 17:30 Tomas Herman, Photoproduction results from ALICE in ultra-peripheral collisions at the LHC (20+5)

17:30 – 17:55 David Rohr, Overview and 2022 data taking the experience of ALICE online and offline processing in Run 3 (20+5)

17:55 – 18:20 Onesimo Mtintsilana, A search for a heavy pseudoscalar that decays into a Z boson and another heavy scalar boson, leading to four lepton final states in pp collisions at  $\sqrt{s} = 13\sim\text{TeV}$ . (20+5)

Morning December 8<sup>th</sup>

10:00 – 13:30

10:00 – 11:00 Christopher Young, Recent results on Standard Model with the ATLAS detector (50+10)

11:00 – 12:00 Dinesh Srivastava, Dynamics of Charm Production in AA and pp Collisions using Parton Cascade Model (50+10)

12:00 – 12:30 Tea Break

12:30 – 13:30 Ludwik Turko, Hunting for the critical point — recent NA61/SHINE results (50+10)

13:30 – 14:30 Lunch

Afternoon December 8<sup>th</sup>

14:30 – 18:00

14:30 – 14:55 Dilia Maria Portillo Quintero, Searches for new heavy particles using the ATLAS detector (20+5)

14:55 – 15:20 Betty Kibirige, Development of TiO-0016, a web tool for ATLAS Tile Calorimeter (20+5)

15:20 – 15:45 Thuso Mathaha, Two same sign and there lepton final states in four top production at the LHC (20+5)

15:45 – 16:10 Nidhi Tripathi, Use of kernel density estimation in searches for new resonances at the LHC (20+5)

16:10 – 16:30 Tea Break

Jean Cleymans Memorial (16:30-19:00)

16:30 – 17:10 Zebulon Vilakazi (Keynote)

17:10 – 17:30 Daniel Adams

17:30 – 18:00 Dinesh Srivastava

18:00 – 18:30 Ludwik Turk

18:30 – 19:00 Peter Braun-Munzinger

Conference Banquet (19:00-22:00)

Morning December 9<sup>th</sup>

10:00 – 12:00

10:00 – 11:00 Sanjay Kumar Swain, B physics highlights from CMS (50+10)

11:00 – 12:00 Giulia Zanderighi, Higgs physics 10 years after the discovery (50+10)

12:00 – 13:00 Lunch