

Session Program

27-31 Mar 2023

8th BCD ISHEP Cargèse School

Presentations

IESC Cargèse

Wednesday 29 March

09:00

Presentations: Students

Session | Location: IESC Cargèse

09:00–09:10

Studying the Sensitivity of the Upgrade Phase II LHCb Calorimeter for the rare decay $B^0 \rightarrow \pi^0 \pi^0$, where one π^0 decays to the Dalitz $e^+ e^- \gamma$ channel

Speaker

Morvan Vincent

09:10–09:20

Measurement of y_{CP} in meson D^0 decay at LHCb

Speaker

Andrea Petrini

09:20–09:30

Optimisation of Decay Selections $\Lambda_b^0 \rightarrow p K^- e \Lambda_b^0 \rightarrow p \pi^-$ for \mathcal{CP} Asymmetry Measurement

Speaker

Marco Caporale

09:30–09:40

V_0 production in Run 3 at LHCb

Speaker

Noah Albin Behling

09:40–09:50

Automotive lidars in foggy environment

Speaker

Tom Durand

09:50–10:00

Multivariate analysis to discriminate top quark pair production channels at LHC

Speaker

Morgan Del Gratta

10:00–10:10

Machine learning techniques for the search for top-top events with the ATLAS experiment at the LHC

Speaker

Virginia Mazza

10:10–10:20

Machine learning techniques for heavy-flavour baryon production measurements at the LHC

Speaker

Marco Cruciani

10:20–10:30

HS3 - A serialization standard for statistical models in high energy physics

Speakers

Carsten Burgard, Cornelius Grunwald, Oliver Schulz, Robin Pelkner

10:30–11:00 **Coffee**

11:00–11:10

Jet Reconstruction and Global Particle Flow in the ATLAS Experiment for Run 3 of the LHC**Speaker**

Anubhav Gupta

11:10–11:20

Measurement of the top-quark pair to $Z\gamma$ -boson production cross-section ratio at a centre-of-mass energy of 13.6 TeV with the ATLAS detector**Speaker**

Donna Maria Mattern

11:20–11:30 **SN Ia forecast with ZTF phase III****Speaker**

Andréa Antoniali

11:30–11:40 **Entropic gravity****Speaker**

Emiliano Pezzini

11:40–11:50

Study of Hubble Constant Anisotropies with the Zwicky Transient Facility**Speaker**

Antoine SARASAR

12:30–14:00 **Lunch**14:00–14:10 **Neutrino mass hierarchy measurement with DUNE****Speaker**

Giulia Lupi

14:10–14:20

Search for a neutrinoless conversion of a muon to an electron in muonic atoms with the COMET experiment at J-Parc**Speaker**

Thomas Clouvel

14:20–14:30

Lepton masses for a non Universal U(1) model with 2 right-handed massive neutrinos**Speaker**

Ricardo Jaimes

14:30–14:40

Influence of a gravitationally induced phase on neutrino oscillation and Baryogenesis**Speaker**

Sara Krieg

14:40-14:50

Method for nuclear fragment identification in FOOT experiment.

Speaker

Giacomo Santoni

14:50-15:00

Coalescence parameter study and source characterization in the production of (anti)nuclei in high- energy collisions

Speaker

Lorenzo Valla

15:00