

Session Program

25-27 Mar 2021

HPNP Special Edition 2021

Session 4

Online

Thursday 25 March

18:00

Session 4: Session4-A Chair Person: Stefano Moretti (NExT Institute (Soton & RAL, UK))

Session | Location: Online

18:00–18:30 **Higgs Bosons in B-L Supersymmetric Standard Model (BLSSM)**

Speaker

Prof. Shaaban Khalil

18:30–18:45

The $h^0(125)$ decays to $c\bar{c}$, $b\bar{b}$, $b\bar{s}$, photon photon and gluon gluon in the light of the MSSM with quark flavor violation

Speaker

Prof. Keisho Hidaka

18:45–19:00

Higgs masses and decay widths satisfying the symmetries in the (N)MSSM

Speaker

Sebastian Paßehr

19:00–19:15

Radiative corrections to charged Higgs boson decays in NMSSM

Speaker

Kodai Sakurai

19:15–19:30

Towards better Higgs measurements with event-level inputs

Speaker

Lingfeng Li

19:30–19:45

BSM Higgs bosons in the reach of the LHC

Speaker

Thomas Biekötter

19:45–20:00

Probing E_6 Motivated $U(1)$ Theories at the J-PARC KOTO

Speaker

Fagner Correia

20:00

18:00

Session 4: Session4-B Chair Person: Rui Santos (ISEL and CFTC-UL)

Session | Location: Online

18:00–18:30 **Applications of deep machine learning in collider physics**

Speaker

Prof. Cheng-Wei Chiang

18:30–18:45

How to unscramble the NP effects on the non-resonant di-Higgs process at the LHC

Speaker

Jeonghyeon Song

18:45-19:00 **Doubly Charged Higgs Boson Production at Hadron Colliders**

Speaker

Richard Ruiz

19:00-19:15

Scalar and fermion on-shell amplitudes in generalized Higgs effective field theory

Speaker

Ryo Nagai

19:15-19:30 **Resurrection bbh with kinematic shapes**

Speaker

Zhuoni Qian

19:30-19:45 **Probing Higgs Sectors with HiggsBounds and HiggsSignals**

Speaker

Jonas Wittbrodt

20:00

18:00

Session 4: Session4-C Chair Person: Milada Margarete Mühlleitner (KIT)

Session | Location: Online

18:00-18:30 **Global Electroweak Symmetric Vacuum**

Speaker

Minho Son

18:30-18:45 **Possibility of a general U(1) extended theory and its implications**

Speaker

Arindam Das

18:45-19:00

Sudakov resummation of the friction on bubble walls in first-order phase transitions

Speaker

Dr Ryusuke Jinno

19:00-19:15 **CP-violating inflation**

Speaker

Venus Keus

19:15-19:30 **Higgs Inflation, Vacuum Stability, and Leptogenesis**

Speaker

Dr Kimiko Yamashita

19:30-19:45

A new perspective on the first-order electroweak phase transition in the Standard Model Effective Field Theory

Speaker

Dr José Eliel Camargo Molina

19:45-20:00

String Fragmentation in Supercooled Confinement and implications for Dark Matter

20:00

Speaker

Dr Yann Gouttenoire