

Session Program

5-9 Jun 2023

HPNP2023 - The 6th International Workshop on "Higgs as a Probe of New Physics 2023"

Parallel

Osaka University, Nambu Yoichiro Hall
1-1 Machikaneyama-cho, Toyonaka, Osaka, Japan

Tuesday 6 June

11:30

Parallel: Parallel 1-A

Session | **Location:** Osaka University, Nambu Yoichiro Hall, 1-1 Machikaneyama-cho, Toyonaka, Osaka, Japan

11:30-11:45

$\$4b + X\$ / \$4b + W\$$ via electroweak multi-Higgs production as smoking gun signals for the Type-I 2HDM at the LHC

Speaker

Prasenjit Sanyal

11:45-12:00

Slight excess at 130 GeV in search for a charged Higgs boson decaying to a charm quark and a bottom quark at the Large Hadron Collider

Speaker

Dr Muyuan Song

12:00-12:15

Relation between gravitational waves from first-order phase transitions and higher dimensional gauge theories

Speaker

Dr Takuya Hirose

12:15-12:30

Smoking gun signature at 3HDM

Speaker

Atri Dey

12:30-12:45

Multi-photon signatures at LHC as a probe of CP-Violation in 2HDMs

Speaker

Kento Katayama

12:45-13:00

Di-Higgs Boson Production at the Lepton Colliders

Speaker

Xiaorui Wong

13:00

11:30

Parallel: Parallel 1-B

Session | **Location:** Osaka University, Room D307 in Graduate School of Science

11:30-11:45

Constructing all the matrix elements of covariant tensor currents of massless particles in the covariant formulation

Speaker

Jaehoon Jeong

11:45-12:00

Entropy and its conservation in expanding Universe

Speaker

Kiyoharu Kawana

12:00-12:15

Entropy constraints on effective field theory

Speaker

Dr Daiki Ueda

12:15-12:30

Supernova axion emissivity with $\Delta(1232)$ resonance in heavy baryon chiral perturbation theory

Speaker

Dr Shu-Yu Ho

12:30-12:45

Link soliton in models with $U(1)_{\text{global}}$ and $U(1)_{\text{gauge}}$ symmetries

Speaker

Yu Hamada

12:45-13:00

Embedded string in $SU(N) \times U(1)$ Higgs model and its application

Speaker

Yukihiro Kanda

13:00

16:30

Parallel: Parallel 2-A

Session | **Location:** Osaka University, Nambu Yoichiro Hall, 1-1 Machikaneyama-cho, Toyonaka, Osaka, Japan

16:30-16:45

CP violation in gauged $U(1)_B$

Speaker

Dr Toshinori Matsui

16:45-17:00

A model with two scalars in the view of effective theory

Speaker

Apriadi Salim Adam

17:00-17:15

An extended Higgs model as the common origin of neutrino mass, dark matter and baryon asymmetry

Speaker

Kazuki Enomoto

17:15-17:30

Multi-photon decays of the Higgs boson at the LHC

Speaker

Samuel Lane

17:30-17:45

Electric dipole moment and electroweak baryogenesis in a complex singlet extension of the Standard Model with degenerate scalars

Speaker

Chikako Idegawa

18:00

16:30

Parallel: Parallel 2-B

Session | **Location:** Osaka University, Room B308 in Graduate School of Science

16:30-16:45

Pseudo-Nambu-Goldstone Dark Matter from Non-Abelian Gauge Symmetry

Speaker

Yoshiki Uchida

16:45–17:00

Confronting Dark Matter with Dirac Neutrinos**Speaker**

Dibyendu Nanda

17:00–17:15

Nonthermal dark matter production from a light thermal scalar**Speaker**

Shao-Ping Li

17:15–17:30

Scalar Dark Matter with a μ Flavored Mediator**Speaker**

Coh Miyao

17:30–17:45

A global analysis of resonance-enhanced light scalar dark matter**Speaker**

Yu Watanabe

18:00