Session Program

Dec 7 – 10, 2022

IBS-PNU Joint Workshop on Particle Physics and Cosmology

Talks

Wed, December 7

2:00 PM

Talks: (30+10) min X 2 (Chair: Deog Ki Hong)

Session

2:00 – 2:40 PM **Light axions in KKLT axiverse**

Speaker
Kiwoon Choi

2:40 – 3:20 PM **On Higher Dimensional Quantum Field Theory**

Speaker
Kimyeong Lee

3:20 PM

4:00 PM

Talks: (30+10) min + (25+5) min X 3 (Chair: Stephen Lonsdale)

Session

4:00 – 4:40 PM **Signatures of Quantum Superpositions of Black Holes**

Speaker
Robert B. Mann

4:40 – 5:10 PM **Exploring extended Higgs sectors via pair production at the LHC**

Speaker
Thomas Flacke

5:10 – 5:40 PM **Think EFT! Applications of effective field theory to cosmology**

Speaker
Maria Mylova

5:40 – 6:10 PM

Rapid turns in multi-field inflation: restored predictivity and resonant PBH production

Speaker
Perseas Christodoulidis

6:10 PM

Thu, December 8

4:00 PM

Talks: (30+10) min X 3 (Chair: Thomas Flacke)

Session

4:00 – 4:40 PM

Higgstrahlung, dark photons, and invisible particles at Belle & Belle II

Speaker

Youngjoon Kwon

4:40 – 5:20 PM

Quantum Computing for High Energy Collider

Speaker

Myeonghun Park

5:20 – 6:00 PM

Cosmology of gauged (B-L) SUSY models

Speaker

Wan-il Park

6:00 PM

Fri, December 9

9:30 AM

Talks: (30+10) min X 2 (Chair: Jong-Wan Lee)

Session

9:30 – 10:10 AM **Pion light-cone distribution amplitude from a heavy-quark OPE**

Speaker
C.-J. Daivd Lin

10:10 – 10:50 AM

Perspectives on understanding the substructure of multiquark hadrons in lattice QCD

Speaker
Anthony Francis

10:50 AM

11:20 AM

Talks: (30+10) min (Chair: Jong-Wan Lee)

Session

11:20 AM – 12:00 PM **Continuum Dark Matter**

Speaker
Seung J. Lee

12:00 PM

3:30 PM

Talks: (30+10) min X 2 + 15 min X 5 (Chair: Seung J. Lee)

Session

3:30 – 4:10 PM

On the mass spectrum of heavy Higgs bosons in 2HDM in the light of the CDF W-mass anomaly

Speaker
Jae Sik Lee

4:10 – 4:50 PM **Extra gauge symmetries for lepton flavor with vector-like leptons**

Speaker
Hyun Min Lee

4:50 – 5:05 PM **Chimera baryon spectrum in a Sp(4) lattice gauge theory**

Speaker
Ho Hsiao

5:05 – 5:20 PM

Primordial Black Holes and Gravitational Waves from the Tachyonic Instability in Higgs-R^2 Inflation

Speaker
Dhong Yeon Cheong

5:20 – 5:35 PM **FIMP dark matter from a hidden effective supersymmetric theory**

Speaker
Wanda Isnard

5:35 – 5:50 PM **Cosmological PBH production during a 1st order PT**

Speaker
TaeHun Kim

5:50 – 6:05 PM **Pseudo-Nambu-Goldstone inflation with twin waterfalls**

Speaker
Adriana Guerrero Menkara

6:05 PM

Sat, December 10

9:30 AM

Talks: (25+5) min X 3 (Chair: Dong-han Yeom)

Session

9:30 – 10:00 AM **Rectifying No-Hair Theorems in Gauss-Bonnet Theory**

Speaker
Miok Park

10:00 – 10:30 AM **Dynamical analysis in 4D Einstein-Gauss-Bonnet gravity**

Speaker
Gansukh Tumurtushaa

10:30 – 11:00 AM **Trouble with geodesics in black-to-white hole bouncing scenarios**

Speaker
Wei-Chen Lin

11:00 AM

11:30 AM

Talks: (25+5) min X 2 (Chair: Dong-han Yeom)

Session

11:30 AM – 12:00 PM

Beating the Lyth bound with parametric resonance during inflation

Speaker
Jie Jiang

12:00 – 12:30 PM **Scalar Hairy Black Holes with Asymmetric Potential**

Speaker
Xiao Yan Chew

12:30 PM