# **IBS Conference on Dark World**

# Monday, 30 October 2023

### Session: 1 - IBS Science and Culture Center (11:00 - 12:20)

-Conveners: Sanghyeon Chang

time [id] title	presenter
11:00 [2] Invitation to Dark World	YAMAGUCHI, Masahide
11:40 [3] Landscape of the EW scale dark world: DM, dark photon and dark Higgs	KO, Pyungwon

# Session: 2 - IBS Science and Culture Center (14:20 - 15:40)

-Conveners: Hyunsu Lee

time [id] title	presenter
14:20 [4] Recent results from Super-Kamiokande	PRONOST, Guillaume
15:00 [26] Model-independent bounds on WIMPs	SCOPEL, Stefano

### Session: 3 - IBS Science and Culture Center (16:00 - 17:20)

-Conveners: Claudio Gatti

time	[id] title	presenter
16:00	[6] Axion Dark Matter Search at IBS-CAPP	CHUNG, Woohyun
16:40	[7] Efficient High-Mass Resonators and Heterodyne-Based Variance Method for Dark Matter Axion Searches	JEONG, Junu

# Tuesday, 31 October 2023

## Session: 1 - IBS Science and Culture Center (09:20 - 10:40)

#### -Conveners: Stefano Scopel

time [	[id] title	presenter
-	[8] Advances in Strongly Blue Axionic Isocurvature Perturbations and Forecasting Their Detectability	CHUNG, Daniel
10:00 [	[9] Extension of Higgs inflation and phenomenology	SHUNTARO, Aoki

# Session: 2 - IBS Science and Culture Center (11:00 - 12:20)

#### -Conveners: Daniel Chung

time	[id] title	presenter
	[11] Axion Domain Walls, Small Instantons, and Non-Invertible Symmetry Breaking	HONG, Sungwoo
11:40	[12] Search for axion dark matter in the laboratory and in the cosmos	HONG, Deog Ki

## Session: 3 - IBS Science and Culture Center (14:20 - 15:40)

# -Conveners: Hye-Sung Lee

time [id] title	presenter
14:20 [13] Preliminary results from the ALPS II initial science run	SPECTOR, Aaron
15:00 [14] Recent QUAX results on axion searches and prospects for the FLASH experiment	GATTI, Claudio

## Session: 4 - IBS Science and Culture Center (16:00 - 17:20)

#### -Conveners: Moo Hyun Lee

time	[id] title	presenter
16:00	[15] Physics reach of the PandaX-4T experiment	TAO, Yi
	[16] The COSINE dark matter search experiment : Current status and future prospects	LEE, Hyunsu

# Wednesday, 1 November 2023

## Session: 1 - IBS Science and Culture Center (09:20 - 10:40)

#### -Conveners: Woohyun Chung

time [id] title	presenter
09:20 [17] Particle dispersion in ultralight dark matter	CHUN, Eung Jin
10:00 [19] Rydberg-atom quantum simulation of magnon bound state dynamics of Heisenberg magnets	AHN, Jaewook

## Session: 2 - IBS Science and Culture Center (11:00 - 12:20)

#### -Conveners: Deog Ki Hong

time [id] title	presenter
11:00 [21] Nuclear astrophysics activities at CENS	HAHN, Insik
11:40 [20] Exotic hadron spectroscopy with photon and hadron beams	AHN, Jung Keun

### Session: 3 - IBS Science and Culture Center (14:20 - 15:40)

#### -Conveners: Jung Keun Ahn

time [id] title	presenter
14:20 [22] Dark matter searches at B-factories	KIM, Doris
15:00 [23] Current Status and Prospects of the CDEX Collaboration	LIN, Shin-Ted

### Session: 4 - IBS Science and Culture Center (16:00 - 17:20)

### -Conveners: Eung Jin Chun

time [id] title	presenter
16:00 [18] Direct detection experiments and light bosons	VISINELLI, Luca
16:40 [10] Dark matter indirect detection at the precision frontier: an improved prediction for particle spectra	JUEID, Adil

# Thursday, 2 November 2023

## Session: 1 - IBS Science and Culture Center (09:20 - 10:40)

#### -Conveners: Luca Visinelli

time [id] title	presenter
09:20 [27] The muon g-2 puzzles	PASSERA, Massimo
10:00 [25] Gauged Quintessence	LEE, Hye-Sung

# Session: 2 - IBS Science and Culture Center (11:00 - 12:20)

### -Conveners: Shin-Ted Lin

time [id] title	presenter
11:00 [5] Overview of Neutrino Programs in Korea	JOO, Kyung Kwang
11:40 [24] Supernova constraints on dark flavored sectors	CAMALICH, Jorge Martin