



# The 2nd Asian-European-Institutes (AEI) Workshop for BSM and the 10th KIAS Workshop on Particle Physics and Cosmology

## Monday, November 14, 2022

### Morning Session (9:00 AM - 10:30 AM)

-Conveners: Eung Jin Chun

time	[id] title	presenter
9:00 AM	[M] QCD instantons at hadron colliders	KHOZE, Valentin
9:30 AM	[M] Models for self-resonant dark matter	LEE, Hyun Min
10:00 AM	[M] TBA	PARK, Wan-Il

### Morning Session (11:00 AM - 12:30 PM)

-Conveners: Hyun Min Lee

time	[id] title	presenter
11:00 AM	[S] Mediator Decays at Thresholds	MATSUMOTO, Shigeki
11:30 AM	[S] Subfrequency light signals of the dark sector	LEE, Hye-Sung
12:00 PM	[P] Axion Quality Problem and its solution	PARK, Seong Chan

## Tuesday, November 15, 2022

### Morning Session (9:00 AM - 10:30 AM)

-Conveners: Shigeki Matsumoto

time	[id] title	presenter
9:00 AM	[M3] Precision Collider Phenomenology	KRAUSS, Frank
9:30 AM	[M4] TBA	SON, Minho
10:00 AM	[M5] cold electroweak baryogenesis through halo collapse	WHITE, Graham

### Morning Session (11:00 AM - 12:30 PM)

-Conveners: Seong Chan Park

time	[id] title	presenter
11:00 AM	[M6] Axion Solar Halos: From Earth and Space	EBY, Joshua
11:30 AM	[M7] Neutrinos and Non-Invertible Symmetry	HONG, Sungwoo
12:00 PM	[M8] TBA	LI, Shu

## Wednesday, November 16, 2022

### Morning Session (9:00 AM - 10:30 AM)

-Conveners: Valentin Khoze

time	[id] title	presenter
9:00 AM	[9] Anatomy of "Jet Classification using Deep Learning"	NOJIRI, Mihoko
9:30 AM	[10] Axion dark matter with thermal friction	IM, Sang Hui
10:00 AM	[9] DarkSHINE: Dark photon fixed-target search experiment at SHINE facility	WANG, Yufeng

### Morning Session (11:00 AM - 12:30 PM)

-Conveners: Satoshi Shirai

time	[id] title	presenter
11:00 AM	[21] Top quarks as a window to new physics	ENGLERT, Christoph
11:30 AM	[22] Leveraging Quantum Annealer to identify event topologies at High energy colliders	PARK, Myeonghun
12:00 PM	[30] W boson mass anomaly and grand unification	EVANS, Jason

# Thursday, November 17, 2022

## Morning Session (9:00 AM - 10:30 AM)

-Conveners: Frank Krauss

time	[id] title	presenter
9:00 AM	[M4] On Detection of Axion Dark Matter	SHIRAI, Satoshi
9:30 AM	[M5] Imprints of Heavy Inflationary Particles on the Large Scale Structure	KIM, Jeong Han
10:00 AM	[M6] SU(3) symmetry and its breaking effects in charm baryon decays	XING, Zhi-Peng

## Morning Session (11:00 AM - 12:30 PM)

-Conveners: Jeonghyeon Song

time	[id] title	presenter
11:00 AM	[M7] Interplay of Higgs Boson, Dark matter and Neutrinos	BANDYOPADHYAY, Priyotosh
11:30 AM	[M8] Discrete Goldstone Bosons	HOUTZ, Rachel
12:00 PM	[M9] TBA	MUKAIDA, Kyohei

# Friday, November 18, 2022

## Morning Session (9:00 AM - 10:30 AM)

-Conveners: Myeonghun Park

time	[id] title	presenter
9:00 AM	[M4] A Large N expansion for Minimum Bias	MELIA, Tom
9:30 AM	[M5] Hidden dynamics of a sub-component dark matter	SHIN, Seodong
10:00 AM	[M6] Latest results of PandaX-4T experiment	ZHOU, Ning

## Morning Session (11:00 AM - 12:30 PM)

-Conveners: Pyungwon Ko

time	[id] title	presenter
11:00 AM	[M7] Higgs Balls: Novel Non-Topological Solitons via Thermal Corrections	PEARCE, Lauren
11:30 AM	[M8] RGE studies in the two-Higgs-doublet model	SONG, Jeonghyeon
12:00 PM	[M9] The muon g-2 on the lattice QCD	JUNG, Chulwoo