## **Session Program**

12-16 Feb 2023



## IAS Program on High Energy Physics (HEP 2023)

**Conference: Parallel Sessions (Theory)** 

## Tuesday 14 February

14:00	Conferences Devellet Consister (Theory), Dev 1. Consister 1. (Tv2 TU01)
	Conference: Parallel Sessions (Theory): Day 1 - Session 1: (Tu3-TH01) Session
	Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong   Convener: Yongchao ZHANG
	14:00-14:20 New Physics Opportunities in Triangle Singularity
	<b>Speaker</b> Yu GAO
	14:20-14:40 Origin of Neutrino Masses and Seesaw Effective Field Theories
	Speaker Shun ZHOU
	14:40-15:00 A complete tree-level dictionary between BSM models and SMEFT (d $\leq$ 7)
	operators
	<b>Speaker</b> Xu-Xiang Ll
	15:00-15:20 Macroscopic Dark Matter from Cosmic Phase Transitions
15:40	<b>Speaker</b> Sida LU
16:00	Conference: Parallel Sessions (Theory): Day 1 - Session 2: (Tu3-TH02)
	Session   Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong   Convener: Haipeng AN
	Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong Convener: Haipeng AN 16:00-16:20 Fermion Mass Hierarchies and Modulus Stabilisation in Modular-invariant Theories
	Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong   Convener: Haipeng AN 16:00-16:20
	Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong Convener: Haipeng AN 16:00-16:20 Fermion Mass Hierarchies and Modulus Stabilisation in Modular-invariant Theories of Flavour [Zoom] Speaker
	Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong Convener: Haipeng AN 16:00-16:20 Fermion Mass Hierarchies and Modulus Stabilisation in Modular-invariant Theories of Flavour [Zoom] Speaker Serguey PETCOV
	Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong           16:00-16:20         Fermion Mass Hierarchies and Modulus Stabilisation in Modular-invariant Theories of Flavour [Zoom]         Speaker         Serguey PETCOV         16:20-16:40       Light Dark Matter [Zoom]         Speaker         Wen YIN         16:40-17:00       Higgs CP Properties and Their EFT Interpretation
	Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong   Convener: Haipeng AN 16:00-16:20 Fermion Mass Hierarchies and Modulus Stabilisation in Modular-invariant Theories of Flavour [Zoom] Speaker Serguey PETCOV 16:20-16:40 Light Dark Matter [Zoom] Speaker Wen YIN
	Location: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong   Convener: Haipeng AN 16:00-16:20 Fermion Mass Hierarchies and Modulus Stabilisation in Modular-invariant Theories of Flavour [Zoom] Speaker Serguey PETCOV 16:20-16:40 Light Dark Matter [Zoom] Speaker Wen YIN 16:40-17:00 Higgs CP Properties and Their EFT Interpretation Speaker

## Wednesday 15 February

S Li Te C	Conference: Parallel Sessions (Theory): Day 2 - Session 1: (W3-TH01) Session   Socation: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Schnology, Hong Kong   Convener: Yongchao ZHANG 14:00-14:25 New Physics at the Forward Physics Facility (FPF) [Zoom]
c	Convener: Yongchao ZHANG
	14:00-14:25 New Physics at the Forward Physics Facility (FPF) [Zoom]
	Speaker
	Kingman CHEUNG
	14:25-14:50 GW from Early Phase Transition
	Speaker Haipeng AN
	14:50-15:15 Inert Doublet Model [Zoom]
	Speaker Bin GONG
	15:15-15:40 Astro & Particle Physics Relevant
	Speaker Yusheng WU
S L	Conference: Parallel Sessions (Theory): Day 2 - Session 2: (W3-TH02) Session   Socation: IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Sechnology, Hong Kong
с	Convener: Hao ZHANG
	16:00-16:25       Tau Polarization Measurement at FCC-ee [Zoom]         Speaker       Jean-Claude BRIENT
	16:25-16:50 Representation of Fermions in Pati-Salam Model [Zoom]
	Speaker Desheng Ll
ŀ	16:50-17:15 High-quality Axion in the Grand Unified Theories Beyond the SU(5) [Zoom]
	Speaker Ning CHEN
	17:15-17:40
	Testing Neutrino Dipole Portal at Electron Colliders and at the LHC by Long-lived Particle Detectors [Zoom]
	Speaker Yu ZHANG