

Mini Workshop: Theory (IAS2042) / Combined Session (IAS LT)

(HKT | GMT+8) Feb 12 - 13, 2023 at 09:00 - 18:00

Zoom Link: (Theory) <https://hkust.zoom.us/j/94082631680?pwd=MFVrVGx2NVNlbnktTm5CTWFibUJkdz09>

Zoom ID: 940 8263 1680 Passcode: 2023TH

Zoom Link: (Combined Session) <https://hkust.zoom.us/j/94682619734?pwd=cnNDV0xtS3lUMnU0SkQveGYwQXkxQT09>

Zoom ID: 946 8261 9734 Passcode: 2023ED

Theory



For Combined
Session



		Feb 12, 2023 (Sun) [Day 1]			Feb 13, 2023 (Mon) [Day 2]	
		Title	Speaker		Title	Speaker
S-TH1	Chair: Liming ZHANG (Tsinghua U)		Chair: Jia LIU (Peking U)			
	9:00	Low Energy FCNC Searches for Light Scalars and Pseudoscalars [Zoom]	Jure ZUPAN (U of Cincinnati)	Atom Interferometer Experiments to Search for Ultralight Dark Matter and Gravitational Waves [Zoom]	John ELLIS (CERN and King's College)	
	9:20			Shin-Chieh HSU (U of Washington)		
	9:25	Lepton-flavour-violating Z and Quarkonium Decays	Lorenzo CALIBBI (Nankai U)	FASER Experiment at HL-LHC	Ke LI (U of Washington)	
	9:40			New Physics Searches at EIC	Keping XIE (U of Pittsburgh)	
	9:50	Recent Progress on CP Violation	Qin QIN (Huazhong U of Science and Technology)	Study Neutrinos at Future Muon Collider	Qiang LI (Peking U)	
	10:00			Pheno Demands for Future Colliders	Zhen LIU (U of Minnesota)	
	10:15	Status of CEPC Flavor Physics Study	Anson KWOK (HKUST)			
	10:20					
S-TH2	Break		Break			
	Chair: Yu GAO (IHEP)		Chair: Xiaoping WANG (Beihang U)			
	11:00	Photon-jet Events as a Probe of Axion-like Particles at the LHC	Mengchao ZHANG (Jinan U)	HNL Search at Future Electron and Muon Colliders	Ariel ROCK (HKUST)	
	11:25	Models for the Muon EDM	Yuichiro NAKAI (Shanghai Jiaotong U)	ILC Beam Dump Experiment and New Physics Search	Kento ASAI (U of Tokyo)	
	11:50	Time-varying Resonant Mass at Collider and Beam Dump Experiments	Xiao-ping WANG (Beihang U)	Decay of the Mediator Particle at the Threshold [Zoom]	Shigeki MATSUMOTO (U of Tokyo)	
	12:15	Z' and Leptoquark Searches at the P2 Experiment	Yong Chao ZHANG (Southeast U)	Long Lived Particles at FCC-ee [Zoom]	Suchita KULKANRI (U of Graz)	
S-TH3	Self-arranged Lunch		Self-arranged Lunch			
	Chair: Hao ZHANG (IHEP)		Chair: Qin QIN (Huazhong U of Science and Technology)			
	12:40 - 14:00					
	14:00	Weak Mixing Angle Determination and BSM Searches: Theoretical Issues [Zoom]	Alessandro VICINI (U of Milan)	Hidden-charm Exotics and Their Productions [Zoom]	Feng-Kun GUO (Institute of Theoretical Physics)	
	14:25	Searching for the New Physics with Jet Charge [Zoom]	Bin YAN (IHEP)	Measurement of V_{us} with Tau Decays to Test of First Row CKM Matrix Unitarity [Zoom]	Alberto LUSIANI (Scuola Normale Superiore)	
	14:50	SMEFT at Future Lepton Colliders with Machine Learning	Jiayin GU (Fudan U)	Long-lived Scalar at FASER	Wei SU (Sun Yat Sen University)	
	15:15	Tau Polarization Measurement at FCC-ee [Zoom]	Jean-Claude BRIENT (Ecole Polytechnique)	New Physics in Meson Mixing [Zoom]	Luiz Vale SILVA (Universitat de Valencia)	
Combined S-ED2 S-TH4	Break		Break			
	Chair: Jiayin GU (IHEP)		Chair: Zhen LIU (U of Minnesota)			
	15:40 - 16:00					
	16:00	Reconstruction of Hadronic System: Requirement, Status & Perspective	Manqi RUAN (IHEP)	Going Beyond the Dimension 6 EFT in the High Energy/Luminosity Era	Rick S. GUPTA (Tata Institute of Fundamental Research)	
	16:25	TBD (Calorimeter Review) [Zoom]	Roman POESCHL (IJClab)	Probing Heavy Neutral Leptons at Future Experiments [Zoom]	Juraj KLARIC (Catholic University of Louvain)	
	16:50	Review of VTX/Silicon Technology	Zhijun LIANG (IHEP)	Machine Learning at Higgs Factory	Shengdu CHAI (Fudan U)	
	17:15	TPC R&D and Operability at a Circular Collider [Zoom]	Paul COLAS (CEA)	Probing R-parity Violation in B-meson Decays to a Baryon and a Light Neutralino [Zoom]	Zeren Simon WANG (National Tsinghua U)	