

Session Program

13-17 Jan 2025



IAS Program on Fundamental Physics (FP 2025)

Conference: Parallel Sessions (Theory)

Tuesday 14 January

14:00

Conference: Parallel Sessions (Theory): Tu3-TH01

Session |

Location: IAS2042, 2/F, IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong |

Convener: Yang GAO

14:00–14:20 Axion-like Particle at the LHC

Speaker

Kingman CHEUNG

14:20–14:40 Leptophilic Axion-like Particles at Forward Detectors

Speaker

Xuhui JIANG

14:40–15:00 How Viable is a QCD Axion near 10 MeV?

Speaker

Junxuan XU

15:00–15:20

Verifying the Resonance Schemes of Unstable Particles at Lepton Colliders

Speaker

Ui MIN

15:20–15:40 Exploring Deeper into Hidden Sectors

Speaker

Wan-Zhe FENG

15:40

16:10

Conference: Parallel Sessions (Theory): Tu3-TH02

Session |

Location: IAS2042, 2/F, IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong |

Convener: Yiming ZHONG

16:10–16:30 Generalized Symmetries and Model Building

Speaker

Seth KOREN

16:30–16:50 Bootstrapping the Chiral-Gravitational Anomaly

Speaker

Teng MA

16:50–17:10 Constraining Neutrinophilic Mediators at the Forward Physics Facility

Speaker

Jiajun LIAO

17:10–17:30 Geometrizing EFT Matching

Speaker

Xuxiang LI

17:30-17:50

Quantum Reference Frame Transformations and Quantum Relativity of Spacetime

Speaker

Otto KONG

17:50-18:10

Instability of Non-minimal Coupled Proca Field with Pole in Physical Region

Speaker

Aofei SANG

18:10

Wednesday 15 January

14:00

Conference: Parallel Sessions (Theory): W3-TH01

Session |

Location: IAS2042, 2/F, IAS2042, 2/F, Lo Ka Chung Building, Lee Shau Kee Campus, The Hong Kong University of Science and Technology, Hong Kong |

Convener: Otto HANNUKSELA

14:00–14:20

Vanishing of Black Hole Love Numbers

Speaker

Sam WONG

14:20–14:40

Knotted Cosmic Strings and Gravitational Wave

Speaker

Yu HAMADA

14:40–15:00

METRICS Tests of General Relativity with Gravitational Waves

Speaker

Ka Wai CHUNG

15:00–15:20

Probing Signatures of Mirror Asymmetry in the Universe Using Gravitational Waves from Binary Black Hole Mergers

Speaker

Samson LEONG

15:20–15:40

Wiggly Dilaton: A Landscape of Spontaneously Broken Scale Invariance

Speaker

Yu-Cheng QIU

15:40

16:10

Conference: Parallel Sessions (Theory): W3-TH02

Session |

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Convener: [Zoom]Mark HERTZBERG

16:10–16:30

Parity Violation on the Sky

Speaker

Kin-Wang NG

16:30–16:50

Anatomy of the Parity-Violating Four-Point Correlation Functions in Galaxy Surveys

Speaker

Yiming ZHONG

16:50–17:10

Free Streaming in Warm Wave Dark Matter

Speaker

Siyang LING

17:10-17:30

**Can Blue-tilted Primordial Power Spectrum Save the Small Scale Crisis in MW?
From the Perspective of Zoom-In Simulation for MW Host Size Dark Matter Halo**

Speaker

Jianhao WU

17:30-17:50

Measuring Relic Neutrino Effects Against Galaxy Cluster Formation Simulations

Speaker

Wang To Anthony AU

17:50