

Session Program

23-28 Aug 2026



2nd New Horizons for Psi Workshop

Parallel Session A

Monday 24 August

14:00

Parallel Session A Session

14:00–14:15

Searching for Scalar Ultralight Bosons through High-Frequency X-ray Variability

Speaker

Zhiren Wang

14:15–14:30

Observation of Dwarf Galaxies and Fuzzy Dark Matter

Speaker

Yu-Ming Yang

14:30–14:45

Probing the wave nature of light degrees of freedom

Speaker

Chen Sun

14:45–15:00

Heating Up the Black Hole X-ray Binary Accretion Disk by Superradiance

Speaker

Fengwei Yang

15:00–15:15

probing black hole environments with gravitational waves

Speaker

Chen Yuan

15:15–15:30

Black hole superradiance of interacting multifield

Speaker

Zhi-Qing Zhu

15:30

16:00

Parallel Session A Session

16:00–16:15

Gravitational Atomic Spectra: Dynamics, Emission, and the Axion Potential

Speaker

Ximeng Li

16:15–16:30

Background-Induced Forces from Quadratically Coupled Ultralight Dark Matter

Speaker

Dr Hailin Xu

16:30–16:45

Constraining axion quadratic couplings with the Hulse-Taylor binary system

Speaker

Ziwen Yin

16:45–17:00

Dynamical gravitational-wave lensing by gravitational atoms**Speaker**

Zhen-Hong Lyu

17:00–17:15

Illuminating Black Hole Shadows with Dark Matter Annihilation**Speaker**

Yanjie Zeng

17:15–17:30

Constraints on Symmetric Dark Matter from Neutron Star Capture and Collapse**Speaker**

Yuxin Liu

17:30–17:45

Black Hole Ringdown Seen in Photon Polarization Swings**Speaker**

Yehui Hou

17:45

Tuesday 25 August

14:00

Parallel Session A Session

14:00–14:15 **Dr****Speaker**

Bo-Xuan Ge

14:15–14:30

Black-hole - neutron-star mergers: new numerical-relativity simulations and multipolar effective-one-body model with spin precession and eccentricity

Speaker

Alejandra Gonzalez

14:30–14:45

Following massive black hole binaries and triplets to coalescence in live galaxy simulations: gravitational wave source predictions with RAMCOAL

Speaker

Kunyang Li

14:45–15:00

Boson star-black hole binaries: initial data and head-on collisions

Speaker

15:00–15:15

A deep learning framework for amplitude generation of general EMRIs

Speaker

Jian-dong Zhang

15:15–15:30

Relativistic treatment of extreme mass ratio inspirals crossing accretion disks

Speaker

Yuhe Zeng

15:30

16:00

Parallel Session A Session

16:00–16:15

Gravitational Wave Data Analysis using the F-statistic method

Speaker

Haitian Wang

16:15–16:30

Efficiency of current gravitational wave microlensing searches using isolated compact object lenses

Speaker

Uddeepta Deka

16:30–16:45

Resolving individual supermassive black hole binaries in pulsar timing arrays: a harmonic-space framework**Speaker**

Hanyu Cheng

16:45–17:00

Searches for the Isotropic Gravitational-Wave Backgrounds with LIGO-Virgo-KAGRA detectors.**Speaker**

17:00–17:15

SPRING: A Spectral-Level Framework for Strong-Field Tests with Gravitational-Wave Ringdowns**Speaker**

Mr Shitong Guo

17:15–17:30

Accounting for Dark-Dresses in Searches for Gravitational waves from Inspiring Primordial Black Holes using Pattern-Recognition Techniques**Speaker**

Charchit Kumar Sethi

17:30–17:45

Accelerated Bayesian noise estimation for multivariate and non-stationary LISA data**Speaker**

Avi Vajpeyi

17:45

Thursday 27 August

14:00

Parallel Session A Session

14:00–14:15

Resonances in extreme mass ratio inspirals within scalar environments

Speaker

Takuya Takahashi

14:15–14:30

Relativistic signatures of scalar clouds in extreme-mass-ratio inspirals

Speaker

Qi-Xuan Xu

14:30–14:45

Constraining Ultralight Scalar Dark Matter in the Galactic Center with the S2 Orbit

Speaker

14:45–15:00

Evolution of ultralight boson clouds in binary black hole systems

Speaker

Ao Guo

15:00–15:15

Ultralight Boson Ionization from Comparable-Mass Binaries

Speaker

Yuhao Guo

15:30