# International Symposium on Cosmology and Particle Astrophysics: CosPA 2025

# Tuesday, 8 July 2025

#### Parallel 2: chaired by Yudai Suwa (11:10 - 12:30)

time	[id] title	presenter
11:10	[34] Cooling the Shock: New Supernova Constraints on Dark Photons	YUN, Seokhoon
11:30	[35] The Neutron Capture Process Low-Mass Dark Matter Experiments	VILLANO, Anthony
	[36] Probing Terrestrial Relic Neutrino Charge with Mach-Zehnder Interferometer	OTERO, Vincent Gene
12:10	[37] Some studies on dark matter self-interaction	CHEN, Chian-Shu

#### Parallel 2: chaired by Seokhoon Yun (16:40 - 18:20)

time	[id] title	presenter
16:40	[43] Nailing down the theoretical uncertainties of \$\bar{D}\$ spectrum produced from dark matter	JUEID, Adil
17:00	[44] Dynamical friction for circular orbits in self-interacting ultralight dark matter and Fornax globular clusters	KOO, Hyeonmo
17:20	[45] Can white dwarfs be powered by self-annihilating dark matter?	CHU, Cheuk Nam
17:40	[71] How a local structure impacts our understanding on fundamental physics	DING, Qianhang
18:00	[47] The holographic TT¯bar deformation of the entanglement entropy in (A)dS/CFT	CHANG, Jing-Cheng

## Wednesday, 9 July 2025

#### Parallel 2: chaired by Shi Pi (11:10 - 12:30)

time	[id] title	presenter
	[54] Memory Burden Effects and New Mass Ranges of Primordial Black Hole Dark Matter	KOHRI, Kazunori
11:30	[53] Primordial Black Hole Reformation in the Early Universe	LU, Philip
11:50	[52] Peaks sphericity of non-Gaussian random fields	UWABO-NIIBO, Michiru
12:10	[55] Schwinger pair production in global (anti-)de Sitter spacetimes	CHEN, Chiang-Mei

#### Parallel 2: chaired by Ying-li Zhang (16:40 - 18:00)

time	[id] title	presenter
16:40	[91] Cosmological stimulated emission	OTA, Atsuhisa
	[57] Signatures of Primordial Gravitational Waves on the Large-Scale Structure of the Universe	BARI, Pritha
17:20	[58] Primordial Gravitational Waves from Phase Transitions During Reheating	BANIK, Amitayus
17:40	[90] Can Horndeski Genesis be Nonpathological?	PETROV, Pavel

## Thursday, 10 July 2025

## Parallel 2: chaired by Arman Shafieloo (11:10 - 12:30)

time	[id] title	presenter
	[68] Quantum Gravity Meets DESI: Dynamical Dark Energy in Light of Swampland Trans□Planckian Censorship Conjecture	WANG, Junkai
11:30	[69] Tightening dynamical dark energy constraints with galaxy alignments	SHIM, Junsup
	[70] 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	WU, Jianhao
12:10	[46] Holographic Correlators of Boundary/Crosscap CFTs in Two Dimensions	HE, Song

#### Parallel 2: chaired by Yuhang Zhu (16:40 - 18:20)

time	[id] title	presenter
16:40	[77] Synaptic Field Theory	YI, Jaeok
	[79] Constraining the Type 3 interacting dark-energy model using matter pairwise velocity	LUO, Kin Ho
	[78] How Anisotropic can the Universe be: Constraining Axially Symmetric Bianchi Type I Model with Self-Consistent Recombination History and Observables	NG, Boris Hoi-Lun
17:40	[80] Modified Gravity After GW170817: A window via Scalar-Photon Couplings?	VALENCIA-VILLEGAS, Mauricio
18:00	[89] Magnetar Formation via Accretion Induced Collpase of White Dwarfs	SIU HEI, Cheung

## **Friday, 11 July 2025**

## Parallel 2: chaired by Chan Park (11:10 - 12:30)

time	[id] title	presenter
11:10	[85] Gravitational wave lensing as a probe of small-scale structures in our universe	CHOI, Han Gil
	[86] Investigating ultra-high-density equations of state through gravitational waves from binary neutron stars mergers	BAIOTTI, Luca
11:50	[87] Gravitational waveforms from periodic orbits around a quantum-corrected black hole	YANG, Sen
12:10	[88] Superradiant Bosons Driving Supermassive Black Hole Mergers	ZHU, Huiyu