



# International Symposium on Cosmology and Particle Astrophysics: CosPA 2025

Monday, 7 July 2025

Plenary: chaired by Masahide Yamaguchi (17:00 - 18:00)

time	[id] title	presenter
17:00	[1] Flavours of flavoured axion cosmology	VOLKAS, Raymond
17:30	[2] Oscillations and parity violation in gravitational wave background from extra tensor modes	GORJI, Mohammad Ali

# Tuesday, 8 July 2025

## **Plenary: chaired by Raymond Volkas (09:00 - 10:30)**

time	[id] title	presenter
09:00	[4] PQ quality and scale hierarchy of extra dimensional axions	CHOI, Kiwoon
09:30	[3] Searching for WIMPs in celestial bodies	SCOPEL, Stefano
10:00	[5] A New Probe to DE & DM Interaction	WANG, Bin

## **Plenary: chaired by Xiao-Gang He (14:00 - 16:00)**

time	[id] title	presenter
14:00	[12] Cogenesis by Majoron	CHUN, Eung Jin
14:30	[15] Universe with a large lepton asymmetry	KAWASAKI, Masahiro
15:00	[14] Topological Instanton for curved space particle creation and quantum reflections	PEN, Ue-Li
15:30	[13] Decoding Stellar Core-Collapse and Compact-Object Formation with Neutrinos	SUWA, Yudai

# Wednesday, 9 July 2025

## **Plenary: chaired by Kiwoon Choi (09:00 - 10:30)**

time	[id] title	presenter
09:00	[16] Unexplored gravitational wave backgrounds on intergalactic scales	SASAKI, Misao
09:30	[17] Cosmological Implications of Unification: Topological Structures and Gravitational Waves	MAJI, Rinku
10:00	[18] Real-time analysis of vacuum decay in curved spacetime	YOKOYAMA, Jun'ichi

## **Plenary: chaired by Jun'ichi Yokoyama (14:00 - 16:00)**

time	[id] title	presenter
14:00	[19] Early Dark Energy Models and Cosmological Tensions	LEE, Bum-Hoon
14:30	[20] Sommerfeld effect and unitarity	SATO, Ryosuke
15:00	[21] (ZOOM) Electroweak phase transition and cosmological magnetic field from a symmetry perspective	HAMADA, Yuta
15:30	[22] The SABRE South Experiment at the Stawell Underground Physics Laboratory	URQUIJO, Phillip

# Thursday, 10 July 2025

## **Plenary: chaired by Sang Pyo Kim (09:00 - 10:30)**

time	[id] title	presenter
09:00	[23] More fields are different: Stochastic view of multi-field inflationary scenario	TAKAHASHI, Tomo
09:30	[24] Resolving the neutrino mass and DESI BAO tensions with neutrino chemical potential	CHU, Ming-Chung
10:00	[25] Metric-Affine Theories of Gravity: From theory to new possible effects	BAHAMONDE, Sebastian

## **Plenary: chaired by Kazunori Kohri (14:00 - 16:00)**

time	[id] title	presenter
14:00	[26] Are we entering a new era of modern cosmology?	CAI, Rong-Gen
14:30	[27] Is a stable anisotropic inflation viable?	DO, Tuan Quoc
15:00	[28] Reconstructing Dark Energy	SHAFIELOO, Arman
15:30	[29] (ZOOM) Disentangling Modified Gravity and Massive Neutrinos with Intrinsic Shape Alignments of Massive Halos	LEE, Jounghun

# Friday, 11 July 2025

## **Plenary: chaired by Stefano Scopel (09:00 - 10:30)**

time	[id] title	presenter
09:00	[6] Flavorful Light Dark Matter Window From NA62 K $\rightarrow$ $\pi$ invisible	HE, Xiao-Gang
09:30	[7] Complications in Simple Dark Sectors	MCKEEN, David
10:00	[8] Phenomenological Consequences of Phase Transitions During Inflation	AN, Haipeng

## **Plenary: chaired by Masahide Yamaguchi (14:00 - 15:30)**

time	[id] title	presenter
14:00	[9] Confronting IR divergences in de Sitter QFT	SYPSAS, Spyros
14:30	[10] Inflation beyond slow-roll, non-Gaussianity, and primordial black holes	PI, Shi
15:00	[11] Formation of primordial black holes from inflationary models	ZHANG, Ying-li