# IBS CTPU-CGA 2025 Summer School and Workshop for High Energy Physics and Cosmology in Korea

# Tuesday, 29 July 2025

### 35+25: chaired by Sangmin Lee (10:00 - 11:00)

time [id] title	presenter
10:00 [3] Lie, Noether, Kosmann, and Diffeomorphism Anomalies Revisited	Prof. YI, Piljin
10:35 [11] Energy-Momentum via Lie and Kosmann	KIM, Taeyeon

#### 35+25: chaired by Ho Seong Hwang (11:30 - 12:30)

time [id] title	presenter	
11:30 [4] Cosmology from measurements of the matter-radiation-equality scale	Prof. PARKINSON, David	
12:05 [12] Delensing CMB B-modes with Rubin LSST survey	SARAF, Chandra Shekhar	

## Wednesday, 30 July 2025

## 35+25: chaired by Junggi Yoon (10:00 - 11:00)

time [id] title	presenter
10:00 [1] Quantum physics seen through a gravitational lens	Prof. KIM, Keun-Young
10:35 [20] String theory and black hole microstructure: Towards resolving horizons and singularities	HAMPTON, Shaun D.

### 35+25: chaired by David Parkinson (11:30 - 12:30)

time	[id] title	presenter	
11:30	[6] Mapping the Universe of Dark Matter: Tensions in the Standard Cosmological Model	Prof. HWANG, Ho Seong	
12:05	[21] Peak Sphericity of non-Gaussian random fields	UWABO-NIIBO, Michiru	

## **Thursday, 31 July 2025**

## 35+25: chaired by Piljin Yi (10:00 - 11:00)

time	[id] title	presenter
10:00	[7] Scattering Amplitudes for Gravitational Wave	Prof. LEE, Sangmin
	[22] Gravitational Binary Dynamics in Post-Minkowskian Expansion and Poincaré Symmetry	LEE, Hojin

### 35+25: chaired by Dong-Won Jung (11:30 - 12:30)

time	[id] title	presenter
11:30	[8] Cosmological stimulated emission	Prof. OTA, Atsuhisa
	[23] Cosmological Implications of Unification: Topological Structures and Gravitational Waves	MAJI, Rinku

# Friday, 1 August 2025

## 35+25: chaired by Sebastain Bahamonde (10:00 - 11:00)

time [id] title	presenter
10:00 [9] Classical Geometry from Matrix Model	YANG, Hyun Seok
10:35 [31] Stability and cosmological dynamics of the Bumblebee field	NILSSON, Nils Albin

## 35+25: chaired by Masahide Yamaguchi (11:30 - 12:30)

time [id] title	presenter
11:30 [10] Foundations of Metric Affine theories of gravity and black holes	Prof. BAHAMONDE, Sebastian
12:05 [32] The Tale of Cosmological Collider	ZHU, Yuhang