

The 3rd Workshop on Grand Unified Theories: Phenomenology and Cosmology (GUTPC 2026)

Friday, 10 April 2026

Plenary (09:00 - 10:00)

-Conveners: Zhi-zhong XING

| time | [id] title | presenter |
|-------|---|-----------------------|
| 09:00 | [30] GUT Seesaw Parameters from low energy physics inputs | Prof. HE, Xiao-Gang |
| 09:30 | [42] Probing High-scale Physics with Neutrinoless Double Beta Decay | Prof. DEPPISCH, Frank |

Plenary (10:30 - 12:00)

| time | [id] title | presenter |
|-------|--|-------------------|
| 10:30 | [15] Modulus Stabilization of modular flavor models in Jordan frame supergravity | WANG, Fei |
| 11:00 | [25] Inflation and Cosmological Collider Signals in Modular Theories | Dr AOKI, Shuntaro |
| 11:30 | [21] Lepton Flavor Structure near a Modular Fixed Point | WANG, Xing-Yu |

Plenary (13:30 - 15:00)

-Conveners: Shun Zhou

| time | [id] title | presenter |
|-------|--|-----------------------|
| 13:30 | [31] Prominence: a discriminator of gravitational wave signals | Prof. MARFATIA, Danny |
| 14:00 | [33] One Scale to Rule Them All: Metastable Strings and the PTA Signal | Prof. TURNER, Jessica |
| 14:30 | [35] Non-Abelian Domain walls: oreo and CP violation | FU, Bowen |

Plenary (15:30 - 17:00)

-Conveners: Kohei Kamada

| time | [id] title | presenter |
|-------|---|-----------------------|
| 15:30 | [28] Proton Decay Patterns as Probes of Grand Unified Theories. | Prof. NAGATA, Natsumi |
| 16:00 | [14] BNV nucleon decays in the landscape of effective field theory | Dr MA, Xiao-Dong |
| 16:30 | [6] Planck-Scale Effects on Nucleon Decay in Minimal Supersymmetric SU(5) | HOR, Shihwen |

Saturday, 11 April 2026Plenary (09:00 - 10:00)

-Conveners: Chao-Qiang Geng

| time | [id] title | presenter |
|-------|--|--------------------------|
| 09:00 | [41] Tracking down the route of GUT breaking | Prof. CHUN, Eung Jin |
| 09:30 | [43] TBA | Prof. SANNINO, Francesco |

Plenary (10:30 - 12:00)

-Conveners: Yu-Feng Li

| time | [id] title | presenter |
|-------|--|--------------------------|
| 10:30 | [19] SU(5) GUTs with or without SUSY? | Prof. ZHU, Jingya |
| 11:00 | [11] $SSU(5)_S$ Yukawa sectors beyond leading order | Dr SHUKLA, SAURABH KUMAR |
| 11:20 | [1] Extended SO(10)-inspired models and leptogenesis | HU, Xubin |
| 11:40 | [4] TeV-scale scalar leptoquarks motivated by B anomalies improve Yukawa unification in SO(10) GUT | GAO, Xiyuan |

Plenary (13:30 - 15:00)

| time | [id] title | presenter |
|-------|---|------------------|
| 13:30 | [12] Hints of an Electroweak Phase Transition and Electroweak Baryogenesis? | ATHRON, Peter |
| 14:00 | [2] A GUT-scale first-order phase transition during Starobinsky inflation | WANG, Shao-Jiang |
| 14:30 | [7] High-frequency gravitational waves from first-order phase transitions | AI, Wenyuan |

Plenary (15:30 - 16:50)

-Conveners: Tao Zhu

| time | [id] title | presenter |
|-------|---|--------------------------------|
| 15:30 | [34] Inflation vs Bounce: red or blue, and how much blue? | Prof. KOSHELEV, Alexey |
| 16:00 | [27] Cosmology in warped massive gravity | Prof. GARCIA-SAENZ , Sebastian |
| 16:30 | [24] Nonsingular Cosmologies in Horndeski Gravity | Dr PETROV, Pavel |

Sunday, 12 April 2026

Plenary (09:00 - 10:00)

| time | [id] title | presenter |
|-------|--|-----------------|
| 09:00 | [39] Paths to Solving the Strong CP Problem and the Footprints Left Behind | NAKAI, Yuichiro |
| 09:30 | [13] New Axion Misalignment Mechanism | CHAO, Wei |

Plenary (10:30 - 12:00)

-Conveners: Zhi-Wei Wang

| time | [id] title | presenter |
|-------|--|------------------------|
| 10:30 | [29] Is there a UV free E6 GUT? | Prof. BAJC, Borut |
| 11:00 | [32] Asymptotic Grand Unified models | Prof. DEANDREA, Aldo |
| 11:30 | [38] UV behavior and symmetry breaking of 5D asymptotic GUTs | Prof. PASECHNIK, Roman |

Plenary (13:30 - 15:00)

-Conveners: Yi Yang

| time | [id] title | presenter |
|-------|--|-------------------|
| 13:30 | [40] The Three-Family N=1 Supersymmetric Pati-Salam Models from Type IIA String Theory on $T^6/(Z_2 \times Z_2)$ Orientifold with Non-Rigid and Rigid Intersecting D6-Branes | Prof. LI, Tianjun |
| 14:00 | [23] Flavor Physics and CP from Non-Invertible Selection Rules | OTSUKA, Hajime |
| 14:30 | [36] Model Building with Non-Invertible Selection Rules: Two Examples in Lepton Physics | Dr WU, Jia-Jun |

Plenary (15:30 - 17:00)

-Conveners: Ye-Ling Zhou

| time | [id] title | presenter |
|-------|--|---------------------|
| 15:30 | [37] Unifying Neutrino Mass and Cosmology in a Triplet-Doublet Extension | Prof. KANG, Sin Kyu |
| 16:00 | [3] Revealing Neutrino Mass Orderings at Colliders | LIU, Wei (刘威) |
| 16:30 | [22] Prospects for probing DM with the TRIDENT neutrino telescope | CHEEK, Andrew |

Monday, 13 April 2026

Plenary (09:00 - 10:00)

| time | [id] title | presenter |
|-------|---|------------------|
| 09:00 | [9] Matter-genesis via Heavy particle decay from Primordial Black Holes | KUWAHARA, Takumi |
| 09:30 | [16] Isocurvature Features from Affleck-Dine Type Baryogenesis | LI, Lingfeng |

Plenary (10:30 - 12:00)

-Conveners: Anna Tokareva

| time | [id] title | presenter |
|-------|---|---------------------|
| 10:30 | [26] Gravitational particle production | Prof. LEBEDEV, Oleg |
| 11:00 | [5] Cosmological Gravitational Particle Production: Sterile Neutrinos as Dark Matter candidates | KOUTROULIS, FOTIS |
| 11:20 | [10] Freeze-in sterile neutrino DM in a feebly gauged SB-LS model | UCHIDA, Yoshiki |
| 11:40 | [17] Probing quark-lepton correlation in GUTs with high-precision neutrino measurements | CHEN, Zi-Qiang |