

Workshop on Grand Unified Theories: Phenomenology and Cosmology (GUTPC)

Tuesday, 9 April 2024

Plenary: Session 1 - formal theory (09:30 - 11:30)

-Conveners: Ye-Ling Zhou

time	[id]	title	presenter
09:30	[20]	F-Theory GUTs: Prospects and Challenges	Prof. LEONTARIS, George
10:00	[10]	Susy breaking in a UV finite GUT	Prof. BAJC, Borut
10:30	[11]	Modular Flavor Symmetry in Heterotic E_6 GUT	OTSUKA, Hajime
11:00	[18]	Journey Towards Asymptotically Safe GUT	Prof. WANG, Zhi-Wei

Plenary: Session 2 - particle phenomenology (14:00 - 15:30)

-Conveners: Tong Li

time	[id]	title	presenter
14:00	[24]	Proton Decay and SU(5) Grand Unification	Prof. EVANS, Jason
14:30	[9]	Investigating the BNV dinucleon to dilepton decays in the EFT	Dr MA, Xiao-Dong
14:50	[4]	On the Standard Model quark/lepton masses in an SU(8) theory	陈, 宁
15:10	[5]	Overview of Proton Decay Search Experiments	TAKENAKA, Akira

Plenary: Session 3 - cosmology (16:00 - 17:30)

-Conveners: Anna Tokareva

time	[id]	title	presenter
16:00	[22]	Dark matter from sterile-sterile neutrino mixing	Prof. DI BARI, Pasquale
16:30	[7]	Axion dark matter and the cosmic dipole problem	韩, 成成
16:50	[6]	Unification and Composite Asymmetric Dark Matter	KUWAHARA, Takumi
17:10	[2]	Phase transition catalyzed by primordial black holes	ZENG, Zhenmin

Wednesday, 10 April 2024

Plenary: Session 4 - gravitational waves (09:30 - 11:30)

-Conveners: Hong-Wei Yu

time	[id] title	presenter
09:30	[28] Proton Decay and Gravitational Waves as Complementary Tests of Grand Unification	Prof. TURNER, Jessica
10:00	[26] Cosmic superstrings vs gauge strings: gravitational wave signals	Prof. MARFATIA, Danny
10:30	[14] Revisiting Metastable Cosmic String Breaking	Dr SHIRAI, Satoshi
11:00	[16] Gravitational Waves from Early Universe Symmetry Breakings	GUO, Huaike

Plenary: Session 5 - flavour problem (14:00 - 15:30)

-Conveners: Kohei Kamada

time	[id] title	presenter
14:00	[8] Modular Grand Unification Theories	DING, Gui-Jun
14:30	[30] Phenomenological tests of supersymmetric SO(10) grand unified theories	FU, Bowen
14:50	[15] Yukawa coupling unification in SO(10) GUTs and the origin of Yukawa hierarchy of third-generation fermions	OUYANG, Ruiwen

Plenary: Session 6 - model-building (16:00 - 17:40)

-Conveners: Jiang-Hao Yu

time	[id] title	presenter
16:00	[19] The Three-Family N=1 Supersymmetric Pati-Salam Models from Type IIA String Theory on $T^6/(Z_2 \times Z_2)$ Orientifold with Intersecting D6-Branes	Prof. LI, Tianjun
16:30	[27] Theory and phenomenology of Flavoured Trinification	Prof. PASECHNIK, Roman
17:00	[13] Exploring GUT origins of SMEFT operators	XIAO, Ming-Lei
17:20	[17] A phenomenological study of SU(5) with Type-I+III seesaw	FANG, Gaoxiang

Thursday, 11 April 2024

Plenary: Session 7 - GUT and beyond (09:30 - 12:00)

-Conveners: Chao-Qiang Geng

time	[id]	title	presenter
09:30	[29]	Hyperunified Theory	Prof. WU, Yue-Liang
10:10		Coffee break and group photo	
10:30	[21]	From first order phase transitions to Gravitational waves	Prof. ATHRON, Peter
11:00	[12]	Modular invariance and the QCD theta angle	Dr TITOV, Arsenii