

Conference Program

July 1

9:00 Opening

9:30 Haipeng An

Consequences of phase transitions during inflation

10:10 COFFEE

10:30 Roberto Percacci

The physical running of couplings in quadratic gravity

11:10 Alberto Salvio

Quadratic Gravity and Quantum Cosmology

11:50 LUNCH

13:40 Fabio Scardigli

Scale-dependent gravity and Planck stars

14:20 Jing Ren

Not quite black holes and gravitational wave echoes

15:00 Jun Peng

Gravitational Axial Perturbation of Slowly-Rotating Compact Objects

15:40 COFFEE

16:00 Gang Yang

Probing Quantum Gravity via Gauge Theory

16:40 Shuang-Yong Zhou

Causality bounds on gravitational EFTs

July 2

9:00 Slava Mukhanov

Resolving Singularities In Gravity

9:40 Hong Li

Exploring Primordial Gravitational Waves in the Himalayas

10:20 COFFEE

10:40 Bob Holdom

Ghosts on the way to a gravity QFT

11:20 Xian Gao

Modifying gravity without extra degrees of freedom

12:00 LUNCH

13:40 Leonardo Modesto

Nonlocal Quantum Gravity and Particle Physics.

14:20 Gianluca Calcagni

Nonlocal quantum gravity and the early universe: imminent test with gravitational waves

15:00 Leslaw Rachwal

Power of UV-Finite and Six-Derivative Gravitational Theories

15:40 COFFEE

16:00 Robert Brandenberger – online

Emergent metric space-time and early universe cosmology from a non-perturbative definition of superstring theory

16:40 Yingli Zhang

Primordial Black Holes seeded during inflation

17:20 Yuhang Yang 20'

Quintom cosmology and modified gravity after DESI 2024

July 3

9:00 Misha Shaposhnikov

Weyl-invariant Einstein-Cartan gravity: unifying the strong CP and hierarchy puzzles

9:40 Taotao Qiu

bouncing cosmology: problems and its solutions

10:20 COFFEE

10:40 Kohei Kamada

UV-extending Higgs inflation in Einstein-Cartan Gravity

11:20 Lijing Shao

Superradiant instabilities of massive bosons around exotic compact objects

12:00 Group Photo

12:10 LUNCH

13:40 Andrea Addazzi

Gravitational Waves and Phase Transitions

14:20 Zhong-Zhi Xianyu

Analytical methods for cosmological correlators.

15:00 Dong-Gang Wang

The Cosmological Bootstrap: Theory and Observations

15:40 COFFEE

16:00 Antonino Marciano – online

Stochastic Ricci flow: emerging complexity in quantum and analog gravity

16:40 Roberto Casadio

The scale(s) of quantum gravity and integrable black holes

18:00 Conference Dinner

Conference Program

July 4

9:00 Andrei Barvinsky

Conundrum of higher derivative quantum gravity: Hořava model, renormalization group and asymptotic freedom

9:40 Yi-Fu Cai

Nonperturbative relics from the very early Universe

10:20 COFFEE

10:40 Damiano Anselmi

Inhomogeneities, primordial black holes and some hypotheses about the Universe

11:20 Shi Pi

Non-Gaussianity in the primordial black hole formation

12:00 LUNCH

13:40 Alessia Platania

Unearthing the intersections: positivity bounds, weak gravity conjecture, and asymptotic safety landscapes from photon-graviton flows

14:20 Benjamin Knorr

Field redefinitions in Asymptotic Safety

15:00 Luca Buoninfante

New lower bounds on scattering amplitudes: nonlocality constraints

15:40 COFFEE

16:00 Irina Aref'eva – online

dS/Bose gas duality

16:40 Emmanuel Saridakis

(Late-time) "Solutions" to H0 and S8 tensions through modified gravity

17:20 Best Poster talk 20'

July 5

9:00 Kellogg Stelle

Gravity localisation and supergravity on branes

9:40 Anna Tokareva

Non-perturbative gravity: when singular black holes are forbidden?

10:20 COFFEE

10:40 Mariam Bouhmadi-Lopez

Speeding up the Universe and late-time singularities

11:20 Alexander Vikman

Make Ghosts Stable Again

12:00 LUNCH

13:40 Manuel Asorey

Good and bad ghosts in super-renormalizable theories

14:20 Sravan Kumar

On the origins of CMB anomalies, direct-sum inflation, and quantum gravity

15:00 Fiorenzo Bastianelli

Worldline Path Integrals for the Graviton and 1-Loop Divergences in Quantum Gravity

15:40 Closing