Session Program

May 6 – 10, 2024

Loops'24 International Conference on Quantum Gravity

Cosmology

Broward County Main Library Auditorium
Florida Atlantic University, Fort Lauderdale Campus, 111 E Las Olas Blvd, Fort Lauderdale, FL 33301, USA

Tue, May 7

2:00 PM

Cosmology

Session | **Location:** FAU FTL Room 312

2:00 – 2:15 PM **Emergent dark energy from loop quantum cosmology**

Speaker
Yongge Ma

2:15 – 2:30 PM
Hydrodynamics on minisuperspace: connecting quantum gravity and cosmology

Speaker
Daniele Oriti

2:30 – 2:45 PM
Inflationary and pre-inflationary scalar perturbations on closed universes in loop quantum cosmology

Speaker
Nelson Yokomizo

2:45 – 3:00 PM
Uniform Asymptotic Approximation Method with Pöschl–Teller Potential

Speaker
Rui Pan

3:00 – 3:15 PM
Universal properties of the universe in modified loop quantum cosmologies

Speakers
Jamal Saeed, Mr Christian Brown

3:15 – 3:30 PM **Angular power spectrum from different regularizations in LQC**

Speaker
meysam motaharfar

3:30 – 3:45 PM
Investigating Singularity Resolution in Loop Quantized Bianchi-IX Spacetimes: Ekpyrotic Potentials

Speaker
Rachel Brown

4:00 PM

4:30 PM

Cosmology

Session | **Location:** FAU FTL Room 312

4:30 – 4:45 PM **Semiclassical geometrodynamics of homogeneous cosmology**

Speaker
Muhammad Muzammil

4:45 – 5:00 PM **Bouncing cosmology from LQC with ekpyrotic and matter fields**

Speaker
Emmanuel Frion

5:00 – 5:15 PM **The Bounce in the Bianchi models as a quantum scattering**

Speaker
Eleonora Giovannetti

5:15 – 5:30 PM **Precision cosmology as a probe of quantum gravity**

Speaker
Mauricio Gamonal San Martin

5:30 – 5:45 PM **The central role of Gauss constraint across LQC and LQG**

Speaker
Matteo Bruno

5:45 – 6:00 PM
Post-Newtonian gravitational waves with cosmological constant derived from Einstein-Hilbert action

Speaker
Ricardo Escobedo

6:00 – 6:15 PM
Diffusive effects of Planckian discreteness: the thermal bath of quantum-gravity defects

Speaker
Pietro Pellecchia

6:15 PM