

Session Program

6-10 May 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

Monday 6 May

14:00

Cosmology

Session | Location: FAU FTL Room 312

14:00–14:15 **Emergent dark energy from loop quantum cosmology**

Speaker

Yongge Ma

14:15–14:30

Hydrodynamics on minisuperspace: connecting quantum gravity and cosmology

Speaker

Daniele Oriti

14:30–14:45

Inflationary and pre-inflationary scalar perturbations on closed universes in loop quantum cosmology

Speaker

Nelson Yokomizo

14:45–15:00

Uniform Asymptotic Approximation Method with Pöschl-Teller Potential

Speaker

Rui Pan

15:00–15:15

Universal properties of the universe in modified loop quantum cosmologies

Speakers

Jamal Saeed, Mr Christian Brown

15:15–15:30

Angular power spectrum from different regularizations in LQC

Speaker

meysam motaharfar

15:30–15:45

Investigating Singularity Resolution in Loop Quantized Bianchi-IX Spacetimes: Ekpyrotic Potentials

Speaker

Rachel Brown

16:00

16:30

Cosmology

Session | Location: FAU FTL Room 312

16:30–16:45 **Semiclassical geometrodynamics of homogeneous cosmology**

Speaker

Muhammad Muzammil

16:45–17:00

Bouncing cosmology from LQC with ekpyrotic and matter fields

Speaker

Emmanuel Frion

17:00–17:15 The Bounce in the Bianchi models as a quantum scattering**Speaker**

Eleonora Giovannetti

17:15–17:30 Precision cosmology as a probe of quantum gravity**Speaker**

Mauricio Gamonal San Martin

17:30–17:45 The central role of Gauss constraint across LQC and LQG**Speaker**

Matteo Bruno

17:45–18:00**Post-Newtonian gravitational waves with cosmological constant derived from Einstein-Hilbert action****Speaker**

Ricardo Escobedo

18:00–18:15**Diffusive effects of Planckian discreteness: the thermal bath of quantum-gravity defects****Speaker**

Pietro Pellegrichia

18:15