

**Session Program**

**6-10 May 2024**

**Loops'24 International Conference on  
Quantum Gravity**

***Foundation of Quantum Gravity***

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

# Thursday 9 May

14:00

## Foundation of Quantum Gravity

Session | Location: FAU FTL Room 312

14:00–14:15 **Revisiting the quantum polyhedron**

**Speaker**

Maïte Dupuis

14:15–14:30

**Dynamical frames, relational subsystems and gauge-invariant entanglement entropy**

**Speaker**

Fabio Maria Mele

14:30–14:45 **Revisiting loop quantum gravity with selfdual variables**

**Speaker**

Hanno Sahlmann

14:45–15:00 **Coupling of matter to gravity using higher gauge theory**

**Speaker**

Marko Vojinovic

15:00–15:15

**Graph-changing vertex evolution and volume expectation-value computation**

**Speaker**

Thiago Lucena de Macedo Guedes

15:15–15:30

**Quantum Properties and Gravitational Field of a Proper Time Oscillator**

**Speaker**

Hou Yau

15:30–15:45

**Anomalous diffusion and factor ordering in (1+1)-dimensional Lorentzian quantum gravity**

**Speaker**

Rachel Maitra

15:45