

Programme on
“Quantum Physics and Gravity”

May 29 – July 6, 2017

organized by

Markus Aspelmeyer (U Vienna), Caslav Brukner (U Vienna), Domenico Giulini (ZARM Bremen, U Hannover), Daniel Grumiller (TU Vienna), Soo-Jong Rey (Seoul National U)

June 12 – June 16, 2017: Week 3 of the Mini-Workshop on
“Black holes, quantum information and the firewall paradox” (May 29 - June 16, 2017)

• Monday, June 12, 2017

10:00 – 11:00 **Opening and Registration**

11:00 – 11:30 *coffee / tea break*

11:30 – 12:30 **Soo-Jong Rey**

A String Theory That Isn't About String

12:30 – 14:30 *lunch break*

14:30 – 15:30 **Andrea Puhm**

Black hole microstates and a rough end to spacetime

15:30 – 16:00 *break*

16:00 – 17:00 **Ricardo Troncoso**

Soft hairy black holes

• Tuesday, June 13, 2017

10:00 – 11:00 **Kostas Skenderis**

Towards a general AdS/Ricci-flat correspondence

11:00 – 11:30 *coffee / tea break*

11:30 – 12:30 **Valentin Reys**

Exact entropy of 1/4-BPS black holes in $N=4$ supergravity and the mixed Rademacher expansion

12:30 – 14:30 *lunch break*

14:30 – 15:30 **Maximilian Attems**

Non-conformal shock wave collisions

15:30 – 16:00 *break*

16:00 – 17:00 **Steve Giddings**

Nonviolent unitarization: postulates to soft quantum structure of black holes

18:00 – 22:00 **conference dinner**

- **Wednesday, June 14, 2017**

10:00 – 11:00 **Claus Kiefer**

Can quantum-gravitational effects be observed in the cosmic microwave background?

11:00 – 11:30 *coffee / tea break*

11:30 – 12:30 **Pulastya Parekh** *Tensionless Strings: A perspective from the worldsheet*

12:30 – 14:30 *lunch break*

14:30 – 15:30 **Daniel Greenberger**

Some unexpected aspects of mass and proper time in quantum mechanics, and why they should be considered as dynamical objects, represented by Hermitian operators

15:30 – 16:00 *break*

16:00 – 17:00 **Alfredo Perez**

Boundary conditions for General Relativity on AdS3 and the KdV hierarchy

- **Thursday, June 15, 2017**

ESI CLOSED DUE TO HOLIDAY

- **Friday, June 16, 2017**

14:30 – 15:30 **Fabio Novaes**

Classical Conformal Blocks, Isomonodromy and Black Holes

[Please note: This talk will take place at ESI, Schrödinger Lecture Hall]

All talks take place at the ESI, Boltzmann Lecture Hall, except the talk on Friday!