

Program

Sunday, June 25, 2017

17:00 – 21:00 Registration

18:00 *DINNER*

Monday, June 26, 2017

07:30 *BREAKFAST*

08:15 – 08:30 Albert Roura **Welcome words**

08:30 – 09:30 Lajos Diósi **Principle of least decoherence in semiclassical gravity (1986-2017-?)**

09:30 – 10:30 Domenico Giulini **Properties and consequences of the Schrödinger-Newton equation**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 12:00 Stephanie Wehner **A universal test for gravitational decoherence**

12:00 **Conference Photo** (in the front of the lecture hall)

12:10 *LUNCH*

Program

Monday, June 26, 2017

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|---------------|--------------------------------------|--|
| 13:30 – 14:30 | Markus Arndt | The quest for possible mass limits of the quantum superposition principle |
| 14:30 – 15:30 | Hendrik Ulbricht | Prospects of using levitated optomechanics to test quantum mechanics and gravity |
| 15:30 – 16:00 | <i>COFFEE BREAK</i> | |
| 16:00 – 16:15 | Stefan Jorda | About the Wilhelm and Else Heraeus Foundation |
| 16:15 – 17:15 | Catalina Oana Curceanu | Whispers in the cosmic silence. Underground experiments to chart the landscape of (gravity induced) collapse models |
| 17:15 – 18:45 | 3 Minute Poster Presentations | |
| 19:00 | <i>DINNER</i> | |
| 20:00 – 21:30 | Poster Session | |

Program

Tuesday, June 27, 2017

07:30 *BREAKFAST*

08:30 – 09:30 Claus Kiefer **Decoherence in quantum cosmology**

09:30 – 10:30 Bernard Kay **The matter-gravity entanglement hypothesis**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 12:00 William Unruh **Gravitational decoherence**

12:00 *LUNCH*

Program

Tuesday, June 27, 2017

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| 13:30 – 14:30 | Nergis Mavalvala | Gravitational wave detection — first discoveries and beyond |
| 14:30 - 15:30 | Roman Schnabel | Towards a nonclassical state of motion of two mirrors with masses of 0.1 kg |
| 15:30 – 16:00 | <i>COFFEE BREAK</i> | |
| 16:00 – 17:00 | Markus Aspelmeyer | Quantum optomechanics: new opportunities for gravity (quantum) experiments |
| 17:00 – 18:00 | Discussion | |
| 18:00 | <i>HERAEUS DINNER
(social event with cold & warm buffet with complimentary drinks)</i> | |
| 20:00 – 20:30 | Poster Prize | |
| 20:30 – 21:30 | Daniele Vetrugno | LISA Pathfinder results: a ticket to listen to the music of the Universe... from space! |

Program

Wednesday, June 28, 2017

07:30 *BREAKFAST*

08:30 – 09:30 Charis Anastopoulos **Gravity coupling to quantum systems:
coherence vs. decoherence**

09:30 – 10:30 Luis P. García-Pintos **Loss of coherence from using real
clocks and the production of events in
quantum physics**

10:30 – 11:00 *COFFEE BREAK*

11:00 – 12:00 Igor Pikovski **Universal decoherence due to
gravitational time dilation**

12:00 – 13:00 **Closing Discussion**

13:00 *LUNCH*

End of the seminar and departure

NO DINNER for participants leaving on Thursday morning