

Program

Sunday, December 2, 2018

- 17:00 – 20:00 Registration
- 18:00 *BUFFET SUPPER and get-together*
- 20:00 – 21:00 Domenico Giulini **Gravity and quantum mechanics**

Monday, December 3, 2018

- 08:00 *BREAKFAST*
- 09:30 – 09:45 Scientific organizers **Opening**
- 09:45 – 10:30 Florian Marquardt **Topological effects in cavity optomechanics**
- 10:30 – 11:00 *COFFEE BREAK*
- 11:00 – 11:45 Nicolas Gisin **From quantum foundations to applications and back**
- 11:45 – 12:30 Fabio Sciarrino **Experimental tests on quantum causality**
- 12:30 – 12:40 **Conference Photo** (in the front of the lecture hall)
- 12:40 *LUNCH*

Program

Monday, December 3, 2018

14:30 – 15:15	Markus Arndt	Advances in matter-wave experiments with biomolecular nanomatter
15:15 – 16:00	Klaus Hornberger	Testing rotational quantum mechanics with levitated nanoparticles
16:00 – 16:30	<i>COFFEE BREAK</i>	
16:30 – 17:00	Andrea Smirne	Quantum coherence and non-classicality in quantum Markovian processes
17:00-17:30	Francesco Ciccarello	Quantum thermodynamics and collision models: ab initio analysis in a matter-light system
17:30 – 19:30	Poster Session	
19:30	<i>DINNER</i>	

Program

Tuesday, December 4, 2018

08:00	<i>BREAKFAST</i>	
09:00 – 09 :45	Susana Huelga	Are there non-trivial quantum effects in Biology? A discussion on light harvesting processes from an open quantum system perspective
09:45 – 10:30	Mauro Paternostro	Operational Markov condition for quantum processes
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Francesco Buscemi	The role of statistical comparison theory in the study of open quantum systems
11:45 – 12:30	Dariusz Chruscinski	Divisibility and information flow for non-invertible dynamical maps
12:30	<i>LUNCH</i>	
14:30 – 15:15	Jyrki Piilo	Full control of dephasing dynamics — complex quantum networks
15:15 – 16:00	Roberta Zambrini	Non-classical, synchronization and thermodynamic effects in extended open quantum systems
16:00 – 16:30	<i>COFFEE BREAK</i>	
16:30 – 17:00	Manuel Gessner	Detecting system-environment correlations without accessing the environment
17:00 – 17:30	Luca Ferialdi	Qubit entanglement generation by Gaussian non-Markovian dynamics
19:00	<i>HERAEUS DINNER</i> <i>(social event with cold & warm buffet with complimentary drinks)</i>	

Program

Wednesday, December 5, 2018

08:00	<i>BREAKFAST</i>	
09:00 – 09:45	Irene Burghardt	Non-Markovian dynamics in molecular aggregates: coherence and decoherence in structured environments
09:45 – 10:30	Hendrik Ulbricht	Levitated optomechanics experiments towards testing fundamental physics
10:30 – 11:00	<i>COFFEE BREAK</i>	
11:00 – 11:45	Tobias Schätz	Time-resolved observation of thermalization in an isolated quantum system and accessing measures of its non-Markovianity
11:45– 12:15	Sandro Donadi	Testing collapse models: a theory perspective
12:15 – 12:45	Matteo Carlesso	Non-interferometric diagnostics of collapse models
12:45 – 13:15	Scientific organizers	Poster prize award Closing
13:15	<i>LUNCH</i>	

End of the seminar and departure

NO DINNER for participants leaving on Thursday morning