Program

Tuesday, 7 June 2016

17:00 – 21:00	Registration	
18:30	*DINNER / Informal get together*	

Wednesday, 8 June 2016

07:30	BREAKFAST	
08:25 – 08:30	Tommaso Calarco Jacob Sherson	**Opening and welcome**
08:30 – 09:15	Adolfo del Campo	**Tailoring quantum dynamics far away from equilibrium: Shortcuts to adiabaticity and speed limits**
09:15 – 10:00	Norman Margolus	**The finite-state character of physical dynamics**
10:00 – 10:30	*COFFEE BREAK*	
10:30 – 11:15	Shai Machnes	**Optimizing for shortest time at high accuracy with GOAT (Gradient Optimization for Analytic conTrols)**
11:15 – 12:00	Birgitta Whaley	**Distinguishability dynamics and quantum speed limits**
12:00	**Conference Photo** (in the foyer of the lecture hall)	
12:15	*LUNCH*	

Program

Wednesday, 8 June 2016

14:00 – 14:45	Fedor Jelezko	**Qubits in diamond: Solid state quantum registers and nanoscale sensors**
14:45 – 15:30	Ferdinand Schmidt-Kaler	**Speed limits in trapped ion quantum computing**
15:30 – 16:00	COFFEE BREAK	
16:00 – 16:45	Herschel Rabitz	**Does something sublime happen upon seeking optimal control?**
16:45 – 17:30	**Short presentations**	
19:00	*DINNER*	
20:30 – 22:30	**Poster session**	

Program

Thursday, 9 June 2016

07:30	*BREAKFAST*	
08:30 – 09:15	Raam Uzdin	**State-independent speed limits for lossy systems, and for Markovian open quantum systems**
09:15 – 10:00	Christiane Koch	**Identifying the quantum speed limit with optimal control**
10:00 – 10:30	*COFFEE BREAK*	
10:30 – 11:15	Eric Lutz	**Quantum speed limits for open quantum systems**
11:15 – 12:00	Susana Huelga	**On fundamental bounds for metrology and sensing in open quantum systems**
12:15	*LUNCH*	
14:00 – 14:45	Lorenzo Maccone	**Entangled computer bus**
14:45 – 15:30	Jörg Schmiedmayer	**Controlling quantum states of a many body system**
15:30 – 16:00	*COFFEE BREAK*	
16:00 – 16:45	Francesco Cataliotti	**Atom-chip for quantum control**
16:45 – 17:30	Gerhard Hegerfeldt	**Time-optimal quantum control of nonlinear two-level systems**
17:30 – 17:45	Stefan Jorda	**About the Wilhelm and Else Heraeus Foundation**
19:00	*HERAEUS DINNER* *(cold & warm buffet, free beverages)*	
20:30 – 21:30	Jacob Sherson	**Evening Talk:** **Quantum games: Learning from humans, teaching computers**

Program

Friday, 10 June 2016

07:30	*BREAKFAST*	
08:30 – 09:15	Sophie Schirmer	**Design of feedback control laws for time-optimal information transfer in spin networks**
09:15 – 10:00	Simone Montangero	**Optimal control of complex quantum systems**
10:00 – 10:30	*COFFEE BREAK*	
10:30 – 11:15	Oliver Morsch	**Super-fast and super-adiabatic? Investigating transitionless driving protocols**
11:15 – 12:00	Tommaso Calarco Jacob Sherson	**Poster awards and closing remarks**
12:15	*LUNCH*	

End of the seminar *and FAREWELL COFFEE* ***/ Departure***

Please note that there will be ***no*** *dinner at the Physikzentrum on Friday evening for participants leaving the next morning.*