

Summer School, Department of Physics, University College Cork

Shortcuts to Adiabaticity 2016 in Cork (UCC)

Topics: Quantum control with shortcuts to adiabaticity and related topics

Dates: Monday 25th and Tuesday 26th July 2016

Location: University College Cork, Kane Building (Main Campus),

Talks: G18 (Monday)/G19 (Tuesday); Coffee/Poster: G20 (both days)

Timetable:

	Monday, 25 th July	Tuesday, 26 th July
Location:	Lecture Hall: G18	Lecture Hall: G19
9:00	Registration	
9:30-10:30	Andreas Ruschhaupt <i>"Fundamentals of Shortcuts to Adiabaticity"</i>	Andreas Ruschhaupt <i>"Shortcuts to Adiabaticity for finite-level systems"</i>
10:30-11:00	Tea/Coffee Break (G20)	Tea/Coffee Break (G20)
11:00-12:00	Andrea Alberti <i>"Atom transport in optical lattices, and its application in discrete-time quantum walks" (1/2)</i>	Thomas Busch <i>"Quantum gases in different correlation regimes" (1/2)</i>
12:00-14:00	Lunch Break	Lunch Break
14:00-15:00	J. Gonzalo Muga <i>"Shortcuts to Adiabaticity for trapped ions"</i>	J. Gonzalo Muga <i>"Open questions and challenges for Shortcuts to Adiabaticity"</i>
15:00-15:30	Tea/Coffee Break (G20)	Tea/Coffee Break (G20)
15:30-16:30	Andrea Alberti <i>"Atom transport in optical lattices, and its application in discrete-time quantum walks" (2/2)</i>	Thomas Busch <i>"Quantum gases in different correlation regimes" (2/2)</i>
16:30	Steve Campbell <i>"The cost of achieving finite time adiabatic dynamics"</i>	Stefano Moroni <i>"Entangled Photons Diodes"</i>
16:50	Brian O'Sullivan <i>"Quaternions, Spinors and The Hopf-Fibration"</i>	
20:00	Social event for students	