

Stellenbosch Workshop on

QUANTUM MANY-BODY SYSTEMS FAR FROM EQUILIBRIUM: Quench dynamics, thermalisation, and cold-atom experiments

Duration: 09-13 March 2015.

Venue: National Institute for Theoretical Physics, Wallenberg Research Centre, Stellenbosch, South Africa.

Scope: Recent progress in manipulating cold atoms and ions has brought the study of non-equilibrium behavior of isolated quantum systems into the focus of research. This workshop aims at bringing together researchers from a variety of fields related to this topic, including quantum information, statistical physics, mathematical physics, cold atoms and condensed matter physics. For more details see the webpage <http://www.nithep.ac.za/4i5.htm>.

Format: A one-week workshop. Mornings will be taken up by a schedule of 4 talks of 45min each. An extended lunch break of 3 hours will give ample opportunities for discussions, collaborations, or individual work as participants see fit. Two further talks of 45min each conclude the daily schedule.

Invited Speakers:

Alexander Altland, Köln (Germany)
John Bollinger, Boulder (USA)
Cheng Chin, Chicago (USA)
Andrew Daley, Strathclyde (UK)
Sebastian Diehl, Innsbruck (Austria)
Jens Eisert, Berlin (Germany)
*Tilman Esslinger, Zürich (Switzerland)
Andrea Gambassi, Trieste (Italy)
Thomas Gasenzer, Heidelberg (Germany)
Alexey Gorshkov, Maryland (USA)
Christian Gross, Garching (Germany)
Kaden Hazzard, Houston (USA)
Corinna Kollath, Bonn (Germany)

Igor Lesanovski, Nottingham (UK)
Maciej Lewenstein, Barcelona (Spain)
Chris Monroe, Maryland (USA)
Anatoli Polkovnikov, Boston (USA)
Marcos Rigol, PennState (USA)
Christian Roos, Innsbruck (Austria)
Alessandro Silva, Trieste (Italy)
Jörg Schmiedmayer, Wien (Austria)
Ulrich Schollwöck, München (Germany)
Dirk Schuricht, Utrecht (Netherlands)
Izak Snyman, Johannesburg (South Africa)
*Jun Ye, Boulder (USA)

(* to be confirmed)

Financial assistance: Financial assistance is available for a limited number of students or other participants from South African or African universities. Unfortunately, international airtickets cannot be covered. To apply, please register at <http://www.nithep.ac.za/4i5.htm> and submit supporting material and a letter of motivation.

Registration: Please apply online at <http://www.nithep.ac.za/4i5.htm>. Cost of registration (including lunches and coffee breaks) is R2500. Deadline for registration is 30 November 2014.

Organizers:

Prof. Michael Kastner (National Institute for Theoretical Physics, South Africa),
kastner@sun.ac.za.
Prof. Hanns-Christoph Nägerl (University of Innsbruck, Austria).

Sponsors:

