

**Day 1 – October 20 2016**

09:00 - 09:10	G. Kresse	p01	<i>Welcome Words</i>
09:10 - 09:40	T. Schäfer	p02	<i>Quartic scaling MP2 for periodic systems</i>
09:40 - 10:10	M. Wolloch	p09	<i>Impact of lattice dynamics on the phase stability of metamagnetic FeRh: Bulk and thin films</i>
10:10 - 10:40			<i>Coffee Break</i>
10:40 - 11:20	A. de Vita	guest	<i>Materials Chemomechanics by Inference-Boosted First Principles Modelling</i>
11:20 - 12:00	S. de Gironcoli	guest	<i>Teaching new tricks to an old dog</i>
12:00 - 13:30			<i>Lunch Break@Pizza Riva</i>
13:30 - 14:10	R. Valenti	guest	<i>Challenges in designing correlated materials with topological phases</i>
14:10 - 14:40	A. Tröster	p07	<i>Landau theory meets DFT: the tetragonal-to-cubic high pressure phase transition of lead titanate</i>
14:40 - 15:20	E. Locatelli	p14	<i>Star - long chain mixtures: a novel coarse-graining approach</i>
15:20 - 15:50			<i>Coffee Break</i>
15:50 - 16:20	A. Pasquarello	guest	TBA
16:20 - 16:50	F. Lackner	p05	<i>Time-dependent two-particle reduced density matrix theory: Application to high-harmonic generation</i>
17:00 - 18:00			<i>General Meeting (members only)</i>
18:30 -			<i>Dinner @Aera</i>

**Day 2 – October 21 2016**

09:00 - 09:30	M. Sorantin	p03	<i>Towards "Mott solar cells": Impact ionisation processes in the periodic steady state of a driven Hubbard chain</i>
09:30 - 10:00	D. Bauernfeind	p04	<i>Fork Tensor Product States - Efficient Three Orbital Real Time DMFT Solver</i>
10:00 - 10:30	D. Suess	p12	<i>Interaction of Spintransport and Magnetization Dynamics</i>
10:30 - 11:00	TBA	p06	TBA
11:00 - 11:30			<i>Coffee Break</i>
11:30 - 12:00	G. Menzl	p13	<i>Cavitation in water under tension</i>
12:00 - 12:30	Th. Schäfer	p15	<i>The physics underlying electronic spectra: from parquet decomposition to fluctuation diagnostics</i>
12:30 - 13:00	G. Li	p16	<i>High-frequency asymptotics of the vertex function: diagrammatic parametrization and algorithmic implementation</i>

## Venue

All lectures take place at the “Sky Lounge” at the Faculty of Mathematics, (Oskar-Morgenstern-Platz 1, 1090 Vienna, [Google Maps](#)). The Sky Lounge is on the 12<sup>th</sup> floor. The lecture hall is well equipped with a beamer (VGA & HDMI) and a laptop that can be used. Make sure you bring your adapters/flashdrive. WLAN access via *eduroam* (you can also ask Katharina Simma for a temporary ID).

## Registration

When you arrive at the location, please pick up your ID badge and sign in with Katharina Simma before entering the lecture hall. Keep your ID badge clearly visible at all times (especially during the coffee-breaks and during the meals). Finally, please do not forget to return your ID badge before you leave. Thank you in advance.

## Lunch

The Lunch on Thursday will take place in the *Pizza Riva* (Schlickgasse 2, 1090 Wien, [Google Maps](#)), We made a reservation for all participants. Please wear your ID badge visibly.

## Dinner

The dinner on Thursday will take place in the *Aera* (Gonzagagasse 11 / Ecke Werdertorgasse, 1010 Wien, [Google Maps](#)).

## Accommodation

Our guests are accommodated at *Hotel Boltzmann* ([www.hotelboltzmann.at/](http://www.hotelboltzmann.at/), Boltzmannngasse 8, 1090 Wien, [Google Maps](#))

