

# SFB MEETING DECEMBER 13<sup>TH</sup> - 14<sup>TH</sup> 2018

ATOMINSTITUT (ATI), VIENNA

## THURSDAY 13<sup>th</sup> December

## FRIDAY 14<sup>th</sup> December

12:00 - 12:45 SFB Registration

08:30 - 09:30 SFB Board Meeting

13:00 - 13:40 **PROF. JEFF HANGST**  
| Aarhus University

09:30 - 10:10 **PROF. MARCO G. GIAMMARCHI**  
| University of Milan

» Antihydrogen Spectroscopy: the ALPHA experiment at CERN «

» First observation of antimatter wave interference «

13:50 - 14:10 **WOLFGANG NIEDENZU**  
| ESQ

10:20 - 10:40 **LAURIN OSTERMANN**  
| University of Innsbruck

» Cooperative many-body enhancement of quantum thermal machine power «

» Super- and subradiance of clock atoms in multimode optical waveguides «

14:15 - 14:35 **STEFAN GERLICH**  
| University of Vienna

10:45 - 11:05 **SICONG JI**  
| ESQ

» Long Baseline Molecular Interferometry «

» Simulating the Pokrovsky-Talapov Model with tunnelling coupled one-dimensional Bose gases «

14:40 - 15:00 **ÄMIN BAUMELER**  
| ESQ

11:10 - 11:45 Coffee-Break

» Computational complexity theory and causality «

11:45 - 12:05 **DAVID SAUERWEIN**  
| University of Innsbruck

» Transformations among Pure Multipartite Entangled States via Local Operations are Almost Never Possible «

15:05 - 15:45 Coffee-Break

15:45 - 16:05 **GIACOMO SORELLI**  
| University of Freiburg

12:10 - 12:30 **MARIO KRENN**  
| University of Vienna

» Entanglement protection of high-dimensional states by adaptive optics «

» On Computer-Inspired Quantum Experiments «

16:10 - 16:30 **PETER KIRTON**  
| ESQ

12:35 - 12:55 **MARTIN HEBENSTREIT**  
| University of Innsbruck

» The weak to strong light-matter coupling crossover with organic polaritons «

» Matchgate circuits and compressed quantum computation «

16:35 - 16:55 **DMITRY BYKOV**  
| University of Innsbruck

» Ion traps for levitodynamical experiments with mesoscopic particles in high vacuum «

17:00 - 18:30 ESQ Board Meeting | POSTER-SESSION

18:30 **Bus-Departure** from ATI

19:30 **Dinner** (Zum Martin Sepp)

CHAIR: PROF. ARNDT

CHAIR: PROF. WALTHER