Δ-Meeting – Programme

QCD, Nonequilibrium Dynamics, Complex Systems, and Simulational Methods

Thursday 10.1. **16:15 – 17:15** **Philosophenweg 16**

D.F. Litim **Pulling oneself over the fence:**

A bootstrap for quantum gravity

19:00 **Dinner**

FRIDAY 11.1. **9:00 – 20:00** **IWH**

9:00	**B.-J. Schaefer**	**On baryons and the QCD phase structure**
9:30	**N. Strodthoff**	**Aspects of QCD-like theories at finite density**
10:00	**M. Karl**	**Non-thermal fixed points, vortex dynamics, and superfluid turbulence**
10:30		**Break**
11:00	**K. Falls**	**Black hole thermodynamics under the microscope**
11:30	**A. Samberg**	**Heavy quarks in strongly coupled plasmas at finite chemical potential via holography**
12:00	**I. Boettcher**	**Equation of state of the unitary Fermi gas**
12:30	**T. Enss**	**Quantum limited spin transport in ultracold atomic gases**
13:00		**Lunch**
14:00	**M. Oberthaler**	**Universal scaling in quenches with two component condensates**
14:40	**G. Aarts**	**How to climb Mount Everest: the sign problem at finite density**
15:20	**D. Banerjee**	**Quantum simulation of Abelian and Non-Abelian gauge theories using ultra-cold atoms in optical lattices**
15:50		**Break & Information**
16:30	**D. Sexty**	**Gauge cooling in complex Langevin for QCD with heavy quarks**
17:00	**J. Myers**	**A study of the fermionic determinant in QCD-based systems at small chemical potential**
17:30	**T. Herbst**	**On the phase structure and thermodynamics of QCD**
18:00		**Break**
18:30	**S. Borsanyi**	**On the deconfinement temperature in full QCD**
19:00	**J. Langelage**	**Effective theory for thermal lattice QCD with heavy quarks**
19:30	**W. Unger**	**Corrections to the strong coupling limit of staggered lattice QCD**
20:00		**Conference dinner at IWH**

SATURDAY 12.1. **9:00 – 20:00** **IWH**

9:00	**C. Gattringer**	**Scalar QED on the lattice in a dual representation**
9:30	**A. Alexandru**	**Lattice QCD simulations using canonical ensemble**
10:00	**L. Fister**	**Confinement and Yang-Mills thermodynamics from correlation functions**
10:30		**Break**
11:00	**G. Endrodi**	**QCD thermodynamics in magnetic fields: HRG and lattice**
11:30	**F. Bruckmann**	**Inverse magnetic catalysis at the QCD transition**
12:00	**L. Palhares**	**QCD pressure under strong magnetic fields**
12:30	**C. Fischer**	**Phase transitions in strongly interacting theories**
13:00		**Lunch**
14:00	**J. Polonyi**	**Proton scattering on an electron gas**
14:30	**A. Maas**	**Unusal bound states in Higgs theories**
15:00	**C. Schubert**	**Schwinger pair creation in time-dependent fields**
15:30		**Break**
16:00	**R. Alkofer**	**On the role of the quark-gluon vertex in confinement and chiral symmetry breaking**
16:30	**M. Ilgenfritz**	**Thermal crossover with Nf=2 twisted mass quarks**
17:00	**M. Mitter**	**'t Hooft Determinant at finite temperature with fluctuations**
17:30		**Break**
18:00	**D. Mesterhazy**	**Turbulence on the lattice**
18:30	**G. Bergner**	**Supersymmetry on the lattice and simulations of supersymmetric Yang-Mills theories**
19:00	**C. Ford**	**For a few zero modes more**
19:30		**Dinner**