

RBRC Workshop: QCD in Finite Temperature and Heavy-Ion Collisions

February 13-15, 2017

Physics Department, Large Seminar Room

MONDAY, FEBRUARY 13, 2017

08:30-09:00 REGISTRATION

- 09:00-09:10 Welcome..... *Workshop Organizers and Jamie Dunlop (Associate Chair of Physics Department)*
09:10-09:40 H. Ohno..... *A general overview of lattice QCD results at $T>0$*
09:40-10:10 J. Andersen..... *Three-loop HTLpt thermodynamics at finite temperature and chemical potential: Resummation versus lattice data*
10:10-10:40 O. Kaczmarek *Transport and spectral properties from Lattice QCD*

10:40-11:00 COFFEE BREAK (included in attendance)

- 11:00-11:30 A. Rothkopf *In-medium heavy quarkonium from lattice effective field theories*
11:30-12:00 M. Berwein..... *NNLO calculation of the Polyakov loop and correlator*
12:00-12:30 J. Weber *Polyakov loop and Polyakov loop correlators in lattice QCD*

12:30-14:00 LUNCH BREAK (on your own, self-pay)

- 14:00-14:30 E. Shuryak..... *Recent progress in understanding of deconfinement & chiral symmetry breaking phase transitions*
14:30-15:00 A. Vuorinen *Cold quark matter and neutron stars*
15:00-15:30 T. Schaefer..... *Chiral & confining phase transitions and instantons/monopoles*

15:30-16:00 COFFEE BREAK (included in attendance)

- 16:00-16:30 K. Jensen..... *Chaos and symmetry breaking in low-dimensional AdS/CFT*
16:30-17:00 M. Lublinsky..... *Anomalous transport from Holography*
17:00-17:20 M. Kaminski *Quasinormal modes of charged magnetic black branes & chiral magnetic transport*
17:20-17:40 S. Sen..... *Chiral shock waves*
17:40-18:00 J. Brewer *Holographic jet shapes and their evolution in strongly coupled plasma*

18:00-20:00 NO HOST DINNER (optional, off-site, self-pay)

TUESDAY, FEBRUARY 14, 2017

- 09:00-09:30 R. Venugopalan... *The chiral anomaly, Berry's phase & chiral kinetic theory from world-lines in quantum field theory*
09:30-10:00 K. Fukushima *Chirality and vorticity with non-trivial geometry at finite temperature*
10:00-10:30 S. Schlichting *Non-equilibrium study of the Chiral Magnetic Effect from real-time simulations with dynamical fermions*

10:30-11:00 COFFEE BREAK (included in attendance)

- 11:00-11:30 M. Stephanov..... *QCD critical point and hydrodynamics*
11:30-12:00 Y. Akamatsu *A kinetic regime of hydrodynamic fluctuations and long-time tails for a Bjorken expansion*
12:00-12:30 Y. Yin *Kibble-Zurek Scaling, hydrodynamics and turbulent cascade*

12:30-14:00 LUNCH BREAK (on your own, self-pay)

14:00-14:30 J. Ghiglieri *O(g) corrections to the transport coefficients of QCD*

14:30-15:00 Y. Mehtar-Tani *Jet substructure in heavy-ion collisions: sensitivity to medium-induced radiation and color decoherence*

15:00-15:30 COFFEE BREAK (included in attendance)

15:30-16:30 A. Kurkela (*Colloquium*) *Thermalization and hydrodynamization in heavy-ion collisions at high energies*

16:30-16:40 SHORT BREAK (included in attendance)

16:40-17:10 G. Basar *Going with the flow: a solution to your sign problems*

17:10-17:40 A. Kotov *Lattice study of dense two-color QCD*

17:40-18:00 J. Eser *The extended linear sigma model within the functional renormalization group approach*

18:00-18:20 A. Monnai *Inhomogeneous thermalization of the quark-gluon plasma*

18:20-20:00 NO HOST DINNER (optional, off-site, self-pay)

WEDNESDAY, FEBRUARY 15, 2017

09:00-09:30 G. David *Direct photons - experimental status*

09:30-10:00 A. Jakovac *Thermodynamics beyond perturbation theory*

10:00-10:30 Z. Szep *QCD phase diagram from low energy effective models*

10:30-11:00 COFFEE BREAK (included in attendance)

11:00-11:30 I. Zahed *Photons and dileptons at collider energies*

11:30-12:00 S.H. Lee *Quarkonium at finite temperature: A QCD sum rule approach*

12:00-12:20 A. Tomiya *Evidence of effective axial U(1) symmetry restoration at high temperature QCD*

12:20-12:40 N. Strodthoff *Correlation functions of Landau-gauge QCD*

12:40 END OF WORKSHOP
