

**DIAS-TH / HIC for FAIR Workshop and School on:
Dense QCD phases in Heavy-Ion Collisions - DM 10**

BLTP Conference Hall, JINR Dubna, Russia, 22.08. – 04.09. 2010

Scientific Programme

Sunday, 22.08.2010 "Warmup" Lectures for the Workshop "CPOD 2010"

- 10:00 Alexander Sorin: [Opening of the DIAS-TH / HIC for FAIR School](#)
- 10:15 Marek Gazdzicki: [Onset of deconfinement in heavy-ion collisions \(I\)](#)
- 11:30 *coffee break*
- 12:00 Giorgio Torrieri: [Fluid dynamics, viscosity and the perfect liquid in HIC \(I\)](#)
- 13:15 *lunch break*
- 14:30 Marek Gazdzicki: [Onset of deconfinement in heavy-ion collisions \(II\)](#)
- 15:30 *coffee break*
- 16:00 Giorgio Torrieri: [Fluid dynamics, viscosity and the perfect liquid in HIC \(II\)](#)
- 17:15 *conclusion of the "warmup lectures" for the CPOD 2010 conference*

18:00 - 20:00 Registration and "Get-Together" in the Hotel "Dubna"

Monday, 23.08.2010

14:30 Tobias Fischer: [Core collapse supernovae in the QCD phase diagram](#)

19:00 *welcome buffet (at the cafeteria)*

Tuesday, 24.08.2010

14:30 Elena Bratkovskaya: [Observables of the deconfinement transition](#)

Wednesday, 25.08.2010

14:30 Excursion to Veksler-Baldin Lab. for High Energy Physics (NICA construction site)
(start from JINR entrance gate)

17:00 - 21:00 Volga boat trip (start at the beach in front of Hotel "Dubna")

Thursday, 26.08.2010

14:30 Toru Kojo: [The quarkyonic phase](#)

Friday, 27.08.2010

14:15 Discussion: [Exploration of the QCD phase diagram](#)

20:00 Workshop dinner at Hotel "Dubna"

Saturday, 28.08.2010

07:00 Excursion to Moscow

09:00 Excursion to Sergiev Posad

Sunday, 29.08.2010

Chairman: Gerd Roepke

09:30 Jorgen Randrup: [Instabilities at the phase transition \(I\)](#)

10:30 *coffee break*

11:00 Sergei Voloshin: [Collective effects and flow in heavy-ion collisions](#)

12:00 Andrey Turlapov: [Experiments with ultracold atomic gases \(I\)](#)

13:00 *lunch break*

14:30 Marcus Bleicher: [Simulations of heavy-ion collisions \(I\)](#)

15:30 *coffee break*

Chairman: Michael Buballa

16:00 Jakub Jankowski: [The quest for quarkyonic matter](#)

16:15 Gustavo Contrera: [Phase diagrams and critical end point determination in nonlocal PNJL models with wave function renormalization](#)

16:30 Rafal Lastowiecki: [Constraints from compact star phenomenology on the equation of state of cold, dense matter](#)

16:45 Steven Mathey: [Two different approaches to the problem of initial conditions in non-equilibrium statistical physics and application to the Unruh model](#)

17:00 *break*

17:15 Sergei Voloshin: [Collective effects and flow in heavy-ion collisions \(E\)](#)

18:15 Andrey Turlapov: [Experiments with ultracold atomic gases \(E\)](#)

Monday, 30.08.2010

Chairman: Giorgio Torrieri

09:30 Marcus Bleicher: [Simulations of heavy-ion collisions \(II\)](#)

10:30 *coffee break*

Chairman: Jorgen Randrup

11:00 Gerd Roepke: [Clusters and liquid-gas transition in nuclear matter \(I\)](#)

12:00 Andrey Turlapov: [Experiments with ultracold atomic gases \(II\)](#)

13:00 *lunch break*

14:30 Dmitry Voskresenskiy: [Kinetics and hydrodynamics of phase transitions in HIC \(I\)](#)

15:30 *coffee break*

Chairman: Alexey Illarionov

16:00 Alexey Shishmarev: [Equations of motion for a classical colored particle](#)

16:15 Oleg Kosmachev: [The simplest and universal constituents for the description of leptons and hadrons](#)

16:30 David Alvarez: [Low density symmetry energy and neutron star crust properties](#)

16:45 Villuvatath Sreekanth: [Thermal photon in the QGP and non-ideality effects](#)

17:00 *break*

- 17:15 Jorgen Randrup: [Instabilities at the phase transition \(E\)](#)
18:15 Dmitry Voskresenskiy: [Kinetics and hydrodynamics of phase transitions in HIC \(E\)](#)

Tuesday, 31.08.2010

Chairman: Andrey Turlapov

- 09:30 Jorgen Randrup: [Instabilities at the phase transition \(II\)](#)
10:30 *coffee break*
- 11:00 Dmitry Voskresenskiy: [Kinetics and hydrodynamics of phase transitions in HIC \(II\)](#)
12:00 Gerd Roepke: [Clusters and liquid-gas transition in nuclear matter \(I\)](#)
13:00 *lunch break*
- 14:30 Marcus Bleicher: [Simulations of heavy-ion collisions \(E\)](#)
15:30 *coffee break*

Chairwoman: Anna Kotynia

- 16:00 Tatyana Karetnikova: [Analysis of linear amplification regime and self-excitation of homogeneous broadband helix TWT](#)
16:20 Pascal Buescher: [Fluctuations around the critical point in the PNJL model](#)
16:40 David Scheffler: [Aspects of the PNJL model at imaginary chemical potential](#)
17:00 *break*
- 17:15 Giorgio Torrieri: [Fluid dynamics, viscosity and perfect fluid in HIC \(E\)](#)
18:15 Gerd Roepke: [Clusters and liquid-gas transition in nuclear matter \(E\)](#)

Wednesday, 01.09.2010

Chairman: Kenji Maeda

- 09:30 Jean-Paul Blaizot: [Heavy quarks in a hot plasma \(I\)](#)
10:30 *coffee break*
- 11:00 Michael Buballa: [Color superconducting quark matter \(I\)](#)
12:00 Sergey Popov: [Compact star constraints on dense matter \(I\)](#)
13:00 *lunch break*
- 14:30 Bernd-Jochen Schaefer: [QCD phase diagram & functional renormalization group \(I\)](#)
15:30 *coffee break*

Chairman: Gustavo Contrera

- 16:00 Leticia Palhares: [Droplets in the cold and dense linear sigma model with quarks](#)
16:15 Giuseppe Colucci: [R-mode and rocket term in superfluid neutron stars](#)
16:30 Carlos Pena: [Quantum harmonic oscillator model for J/psi suppression](#)
16:45 Ekaterina Latukhina: [The dynamics of a "dissipative web map"](#)
17:00 *break*
- 17:15 Sergey Popov: [Compact star constraints on dense matter \(E\)](#)
18:15 Michael Buballa: [Color superconducting quark matter \(E\)](#)

Thursday, 02.09.2010

Chairman: Sergey Popov

09:30 Jean-Paul Blaizot: [Heavy quarks in a hot plasma \(II\)](#)

10:30 *coffee break*

11:00 Michael Buballa: [Color superconducting quark matter \(II\)](#)

12:00 Bernd-Jochen Schaefer: [QCD phase diagram & functional renormalization group \(II\)](#)

13:00 *lunch break*

14:30 Maria Paola Lombardo: [Phases of QCD and critical point from the lattice \(I\)](#)

15:30 *coffee break*

Chairman: David Alvarez

16:00 Kenji Maeda: [Large-N expansion for strongly coupled boson-fermion mixtures](#)

16:15 Daniel Zablocki: [Two-particle correlations in color superconducting quark matter](#)

16:30 Alexey Zhevlakov: [Hadronic Contribution to the anomalous magnetic moment in \(g-2\) in a nonlocal NJL model](#)

16:45 Raj Dahya: [The "Cosmology" of the Mathematical Universe](#)

17:00 *break*

17:10 Jean-Paul Blaizot: [Heavy quarks in a hot plasma \(E\)](#)

18:10 Bernd-Jochen Schaefer: [QCD phase diagram & functional renormalization group \(E\)](#)

Friday, 03.09.2010

Chairwoman: Leticia Palhares

09:30 Jean-Paul Blaizot: [Heavy quarks in a hot plasma \(III\)](#)

10:30 *coffee break*

11:00 Maria Paola Lombardo: [Phases of QCD and critical point from the lattice \(II\)](#)

12:00 Sergey Popov: [Compact star constraints on dense matter \(II\)](#)

13:00 Closing of the summer school

~14:00 Farewell barbecue at the BLTP cafeteria