



Scientific Program

3^d International Symposium on
'Non-equilibrium Dynamics'
(NeD-2014)

&

the 4th Network Workshop on
'Theory of UltraRelativistic heavy Ion Collisions'
(TURIC-2014)

9 - 14 June 2014,
Hersonissos, Crete, Greece



09 June, Monday

Chair: Krzysztof Redlich

- 9:00-9:10 Opening
9:10-9:55 Rene Bellwied (*University of Houston*)
Experimental review: 'What's hot - what's not - at RHIC and LHC'
9:55-10:25 Lorenz von Smekal (*Uni Giessen & TU Darmstadt*)
'QCD-like theories at finite density'
10:25-10:55 Igor Mishustin (*University of Frankfurt*)
'Non-equilibrium Dynamics of the Chiral Fluid'
10:55-11:05 *coffee break*
11:05-11:50 Stanley J. Brodsky (*SLAC, Stanford University*)
Lecture on 'Introduction to the light-front QCD'.
Part 1: 'Introduction to Light-Front Quantization and Applications
to Hadronic and Nuclear Physics'

afternoon break

Chair: Kari Eskola

- 17:00-17:25 Evgeni Kolomeitsev (*Matej Bel University*)
'Three forms of a quantum kinetic equation'
17:25-17:50 Marco Schramm (*TU Darmstadt*)
'Inhomogeneous Phases in the Nambu–Jona-Lasinio Model with Vector Interactions'
17:50-18:15 Philipp Scior (*TU Darmstadt*)
'Tests of Effective Polyakov Loop Actions'
18:15-18:25 *break*
18:25-18:50 Rudy Marty (*University of Frankfurt*)
'The influence of initial conditions on the final observables for heavy-ion
collisions at RHIC energies'
18:50-19:15 Ralf-Arno Tripolt (*TU Darmstadt*)
'Real-Time Spectral Functions from the Functional Renormalization Group'
19:15-19:40 Pok Man Lo (*GSI*)
'Studying QCD medium with thermal Wilson loops'

10 June, Tuesday

Chair: Che-Ming Ko

- 9:00-9:45 John Harris (*Yale University*)
Experimental review: 'Results on High p_T Suppression and Jet Quenching from RHIC to LHC'
- 9:45-10:15 Larry McLerran (*BNL/RBRC/CCNU*)
'A Phenomenological Model for the Glasma and Comments about Photon Production'
- 10:15-10:45 Thomas Epelbaum (*CEA, Paris*)
'Towards the Understanding of Hydrodynamization in Heavy-Ion-Collision'
- 10:45-11:05 *coffee break*
- 11:05-11:35 Claudia Ratti (*Torino University*)
'Fluctuations of conserved charges: lattice meets experiment'
- 11:35-12:20 Stanley J. Brodsky (*SLAC, Stanford University*)
Lecture on 'Introduction to the light-front QCD'.
Part 2: 'Light-Front Holography and the Light-Front Schrödinger Equation'

afternoon break

Chair: Klaus Werner

- 17:00-17:25 Alex Meistrenko (*University of Frankfurt*)
'Nonequilibrium dynamics and the chiral phase transition in a quark-meson model'
- 17:25-17:50 Hamza Berrehrah (*University of Frankfurt*)
'Heavy quark transport properties from CBM to LHC energies'
- 17:50-18:15 Paolo Giuseppe Alba (*University of Turin and INFN*)
'Determination of freeze-out conditions from fluctuations in the Hadron Resonance Gas model'
- 18:15-18:25 *break*
- 18:25-18:50 Andrej Ilnert (*University of Frankfurt*)
'Properties of K^* in a medium'
- 18:50-19:15 Benjamin Sintes (*SUBATECH, Nantes*)
'Hadrons in the NJL model'
- 19:15-19:40 Daniel Nowakowski (*TU Darmstadt*)
'Inhomogeneous chiral symmetry-breaking phases in isospin-asymmetric matter'

11 June, Wednesday

Chair: John Harris

- 9:00-9:30 Klaus Werner (*Nantes*)
'Flow in pPb collisions at the LHC'
- 9:30-10:00 Laszlo P. Csernai (*University of Bergen*)
'Separation of Global Collective and Fluctuating Flow Patterns'
- 10:00-10:30 Takeshi Kodama (*University Rio de Janeiro*)
'Coarse Graining and Hydrodynamic Profile of PSHD time evolution'
- 10:30-10:50 *coffee break*
- 10:50-11:20 Francesco Becattini (*University of Florence and INFN*)
'Local thermodynamical equilibrium and beta frame'
- 11:20-12:05 Stanley J. Brodsky (*SLAC, Stanford University*)
Lecture on 'Introduction to the light-front QCD'.
Part 3: 'Light-Front Thermodynamics, the Light-Front Vacuum,
and the Cosmological-Constant Problem'

afternoon break

Chair: Laszlo Csernai

- 17:00-17:25 Valentina Rolando (*University of Ferrara and INFN Ferrara*)
'Heavy ion collision modeling with ECHO-QGP'
- 17:25-17:50 Volodya Konchakovski (*University of Giessen*)
'Direct flow from the PSHD transport approach'
- 17:50-18:15 Ilkka Helenius (*University of Jyväskylä*)
'Confronting current NLO charged-hadron fragmentation functions with LHC data'
- 18:15-18:25 *break*
- 18:25-18:50 Valentina Mantovani Sarti (*INFN Torino*)
'Higher order fluctuations of strangeness and flavor hierarchy'
- 18:50-19:15 Benjamin Guiot (*SUBATECH, Nantes*)
'Hard probes in pp collisions and the event generator EPOS'
- 19:15-19:40 Rodion Kolevatov (*SUBATECH, Nantes*)
'Energy loss in cold nuclear matter from coherent induced radiation'

12 June, Thursday

Chair: Claudia Ratti

- 9:00-9:30 Burkhard Kämpfer (*HZDR, Rossendorf*)
'Holographic transport coefficients of deconfined matter'
- 9:30-10:00 David Blaschke (*Wroclaw*)
'Beth-Uhlenbeck approach to a hadron resonance gas with Mott effect:
thermodynamics and chemical freezeout'
- 10:00-10:30 Krzysztof Redlich (*University of Wroclaw*)
'The phase diagram and charge fluctuations'
- 10:30-10:50 *coffee break*
- 10:50-11:20 Vincenzo Greco (*University of Catania*)
'Electric conductivity and Shear viscosity of the Quark-Gluon Plasma'
- 11:20-11:50 Horst Stöcker (*GSI*)
Review: 'Highlights of Science at GSI/FAIR' - Part 1

afternoon break

Chair: Dirk Rischke

- 17:00-17:25 Marco Ruggieri (*Catania University*)
'Computation of collective flows within relativistic transport theory at fixed η/s '
- 17:25-17:50 Moritz Greif (*University of Frankfurt*)
'On the Electric Conductivity of the Quark-Gluon Plasma'
- 17:50-18:15 Eduardo Grossi (*University of Florence*)
'Zubarev nonequilibrium density operator and transport coefficients'
- 18:15-18:25 *break*
- 18:25-18:50 Juan Torres-Rincon (*SUBATECH, Nantes*)
'Hadronic interactions of heavy mesons'
- 18:50-19:15 Narine Gevorgyan (*Russian-Armenian University, Yerevan, Armenia*)
Special talk: 'Signature of squeezing in periodically-modulated
parametric dynamics'
- 20:30-22:00 *Conference dinner*

13 June, Friday

Chair: Vincenzo Greco

- 9:00-9:30 Thierry Gousset (*SUBATECH, Nantes*)
'Gluon radiation by heavy quarks at intermediate energy'
- 9:30-10:00 Pol-Bernard Gossiaux (*Nantes*)
'Recent developments for open heavy flavor observables in URHIC'
- 10:00-10:30 Che-Ming Ko (*Texas A&M University*)
'Hot medium effects on charmonium production in p+Pb collisions (tentative)'
- 10:30-10:50 *coffee break*
- 10:50-11:20 Larissa Bravina (*University of Oslo*)
'HYDJET++ model for relativistic heavy ion collisions at RHIC and LHC'
- 11:20-11:50 Horst Stöcker (*GSI*)
Review: 'Highlights of Science at GSI/FAIR' - Part 2

afternoon break

Chair: Carsten Greiner

- 17:00-17:25 Ioannis Bouras (*University of Frankfurt*)
'Mach cones in viscous heavy-ion collisions'
- 17:25-17:50 Vitalii Ozvenchuk (*SUBATECH, Nantes*)
'D-meson propagation in hadronic matter and consequences on heavy-flavor observables in ultrarelativistic heavy ion collisions'
- 17:50-18:15 Das Santosh Kumar (*University of Catania*)
'Heavy Flavor in Medium Momentum Evolution: Langevin vs Boltzmann'
- 18:15-18:25 *break*
- 18:25-18:50 Taesoo Song (*University of Frankfurt*)
'Charm dynamics in heavy-ion collisions'
- 18:50-19:15 Katz Roland (*SUBATECH, Nantes*)
'A quantum approach to quarkonia suppression'
- 19:15-19:40 Evgeny Zabrodin (*University of Oslo*)
'Generation of Higher flow harmonics in hydrodynamics with jets in relativistic AA collisions'

14 June, Saturday

Chair: Igor Mishustin

- 9:00-9:30 Laura Fabbietti (*TUM, Munich*)
'Properties of strange hadrons in vacuum and in nuclear matter'
- 9:30-10:00 Olena Linnyk (*University of Giessen*)
'Photons and dileptons as probes of the hot and dense matter'
- 10:00-10:25 Risto Paatelainen (*University of Jyväskylä*)
'Determining QCD matter viscosity from fluid dynamics with saturated minijet initial conditions in ultrarelativistic A+A collisions'
- 10:25-10:50 Pierre-Alexandre Pantel (*Institut de Physique Nuclaire de Lyon*)
'Dynamical description of an ultracold Fermi gas'
- 10:50 Closing