

"Critical Point and Onset of Deconfinement" Conference "CPOD 2018"

Programme

Monday 24/9

Morning Session, Chair: P. Seyboth

- 09:00-09:45 H. Stöcker : "MAGIC - how Matter's extreme phases can be revealed in Gravitational wave observations and in relativistic heavy Ion Collision experiments"
- 09:45-10:30 G. Odyniec : "Results from Beam Energy Scan (BES) Program at RHIC and plans for the second phase of BES"
- 10:30-11:00 *Coffee*
- 11:00-11:45 K. Grebieszko : "New results on spectra and fluctuations from NA61"
- 11:45-12:00 J. Brewer : "Searching for the QCD critical point via the rapidity dependence of cumulants"
- 12:00-12:30 N. Davis : "Recent results from proton intermittency analysis in nucleus-nucleus collisions from NA61/SHINE at CERN SPS"
- 12:30-12:45 B. Tomasik : "Benchmark values for net proton number fluctuations"
- 12:45-13:30 A. Rustamov : "Identified Particle Fluctuations from ALICE at the CERN LHC"

13:30-16:00 *Lunch, etc.*

Afternoon Session, Chair: D. Zhou

- 16:00-16:30 Ch. Plumberg : "QCD matter with a crossover and a first-order phase transition"
- 16:30-17:15 L. Csernai : "Fluid dynamical phenomena in QGP and its recent experimental signatures"
- 17:15-17:30 *Coffee*
- 17:30-18:00 T. Fischer : "Explosions of massive blue-supergiant stars triggered by the QCD phase transition"
- 19:30 *Concert*
- 20:30 *Welcome Drinks*

Tuesday 25/9

Morning Session, Chair: A. Tsapalis

- 09:00-09:45 Sw. Mukherjee : "QCD phase diagram from lattice"
- 09:45-10:30 C. Ratti : "Lattice-based Equation of State of QCD matter with a critical point"
- 10:30-11:00 *Coffee*
- 11:00-11:30 J. Goswami : "Critical end points in (2+1)-flavor QCD with imaginary chemical potential"
- 11:30-12:00 Fr. Karsch : "News on net-charge fluctuations and correlations from lattice QCD"
- 12:00-12:30 A. Chatterjee : "Off-diagonal cumulants of net-charge, net-proton and net-kaon multiplicity distributions in Au+Au collisions at $\sqrt{s_{NN}}=7.7-200$ GeV from STAR"
- 12:30-13:00 G. Wolschin : "Bottomonia physics at RHIC and LHC"
- 13:00-13:15 M. Lewicki : "Recent measurements of identified hadron spectra and multiplicities in Ar+Sc and Be+Be collisions at SPS energies"
- 13:15-13:30 A. Friesen : "Strange matter and kaon to pion ratio in SU(3) PNJL model"

13:30-16:00 *Lunch, etc.*

Afternoon Session, Chair: L. Turko

- 16:00-16:30 L. Glozman : "Implications of the chiralspin symmetry for QCD at high temperatures and densities"
- 16:30-17:00 Ch. Herold : "Production of Entropy at the Chiral Phase Transition from Dissipation and Noise"
- 17:00-17:30 S. Mao : "Chiral symmetry restoration and quark deconfinement beyond mean field in a magnetized PNJL model"
- 17:30-18:00 *Coffee*
- 18:00-18:30 L. Bravina : "Directed flow and freeze-out in relativistic heavy-ion collisions at NICA and FAIR energies"
- 18:30-18:45 K. Xu : "QCD Critical Point and Finite size effect"
- 18:45-19:00 N. Wink : "From first principle QCD to dynamical fluctuations"
- 19:00-19:15 I. Portillo Vazquez : "QCD phase diagram with a critical point from holographic black holes"

Wednesday 26/9

Morning Session, Chair: M. Gazdzicki

- 09:00-09:30 J. Noronha-Hostler : "Freeze-out temperature from net-Kaon fluctuations at RHIC"
- 09:30-10:00 J. Torres-Rincon : "Nuclear correlations and modifications of the nucleon-nucleon potential due to the QCD critical mode"
- 10:00-10:30 M. Nahrgang : "Dynamics of net-baryon density fluctuations near the QCD critical point"

- 10:30-11:00 *Coffee*
- 11:00-11:30 F. Diakonov : "Finite-size scaling, Intermittency and the QCD critical point"
- 11:30-12:00 M. Bluhm : "Finite size effects on critical fluctuations"
- 12:00-12:30 D. Blaschke : "Chiral symmetry restoration by parity doubling and the structure of neutron stars"
- 12:30-13:00 A. Motornenko : "Equation of state for hot QCD and compact stars from mean field approach"
- 13:00-13:30 F. Rennecke : "Strangeness Neutrality, Baryon-Strangeness Correlations and the Phase Structure of QCD"
- 13:30-16:00 *Lunch, etc.*
Afternoon Session, Chair: A. Kapoyannis
- 16:00-16:30 R. Bellwied : "Composite particle production in relativistic particle collisions through quantum entanglement"
- 16:30-16:45 B. Porfy : "First NA61/SHINE results on Bose-Einstein correlation function"
- 16:45-17:15 P. Pais : "Gribov horizon, Polyakov loop and finite temperature"
- 17:15-17:30 *Coffee*
- 17:30-20:00 *IAC meeting*

Thursday 27/9

Morning Session, Chair: H. Hamagaki

- 09:00-09:45 V. Friese : "Prospects for the study of baryon-rich matter at new facilities"
- 09:45-10:30 T. Galatyuk : "Decoding the Phase structure of QCD at high μ_B with HADES"
- 10:30-11:00 *Coffee*
- 11:00-11:45 M. Kapishin : "Studies of baryonic matter in the BM@N and MPD experiments at Nuclotron/NICA"
- 11:45-12:15 T. Sakaguchi : "High density matter physics at J-PARC-HI"
- 12:15-12:45 Al. Sorin : "Vorticity, hydrodynamic helicity and polarization in baryon-rich matter"
- 12:45-13:15 A. Taranenko : "Anisotropic flow measurements at NICA energies"

Free afternoon-Guided tour-Conference dinner

Friday 28/9

Morning Session, Chair: J. Stroth

- 09:00-09:30 Il. Selyuzhenkov : "Anisotropic flow measurement from NA61/SHINE and NA49 experiments at CERN SPS"
- 09:30-10:00 N. Davis : "Electromagnetic effects and the longitudinal evolution of the system at CERN SPS energies"
- 10:00-10:15 J. Cimerman : "Event averaging and event-shape sorting as seen by femtoscopy"
- 10:15-10:30 S. Morozov : "Forward hadron calorimeter (PSD) of NA61/SHINE for heavy ion studies and its upgrade for experiments beyond 2020"
- 10:30-11:00 *Coffee*
- 11:00-11:30 Y. Yin : "QCD critical point, fluctuations and hydrodynamics"
- 11:30-11:45 G. Ridgway : "Understanding the out-of-equilibrium dynamics near a critical point with Hydro+"
- 11:45-12:00 J.-B. Rose : "Shear viscosity and resonance lifetimes in the hadron gas"
- 12:00-12:30 V. Vovchenko : "QCD equation of state at finite baryon density with fugacity expansion"
- 12:30-12:45 R. Sochorova : "Evolution of multiplicity fluctuations in heavy ion collisions"
- 12:45-13:00 D. Kincses : "PHENIX results on centrality and collision energy dependent Levy analysis of HBT correlation functions"
- 13:00-13:15 A. Merzlaya : "Open charm measurements at CERN SPS energies in the NA61/SHINE experiment - status and plans"
- 13:15-13:30 A. Tefelska : " $K^*(892)^0$ production in p+p interactions at 158 GeV/c from NA61/SHINE"
- 13:30-16:00 *Lunch, etc.*
Afternoon Session, Chair: Fr. Karsch
- 16:00-16:30 P. Zhuang : "Meson properties in magnetized quark matter"
- 16:30-17:15 S. Kowalski : "Experimental Summary Aspects of CPOD"
- 17:15-17:45 *Coffee*
- 17:45-18:30 L. McLerran : "Theoretical Summary"
- 18:30-18:45 : Closing