PROGRAMME

Critical point and onset of deconfinement

Monday 3rd

Chair: M. Stephanov

9.00 Introduction

9:10 Welcome address by INFN Florence Director Prof. E. Iacopini

9.20 - R. Casalbuoni – *QCD critical point: a historical perspective*

10.00 - C. Schmidt – *Recent progress in lattice QCD at finite* μ

10.40 – Coffee break

11.10 - M. P. Lombardo – *Lattice at finite baryon density: imaginary chemical potential*

11.50 - B. Kaempfer – *Quasi-particle perspective on critical end-point*

12:30 - N. Antoniou - *Critical Opalescence in Baryonic QCD Matter*

13.10 Lunch

Chair: E. Shuryak

14:40– L. Turko - *The critical behavior of hadronic matter: a comparison of lattice and bootstrap model calculations*

15:05 - K. Homma - *Search for critical points by measuring spatial correlation lengths via multiplicity density fluctuations*

15:30 - J. Randrup - *Effects & signals of a first-order deconfinement phase transition*

16:10 – Coffee break

16:40 – K. Paech - *Nonequilibrium Dynamics of the Chiral Phase Transition in Heavy Ion Collisions*

17:10 – F. Diakonos - *Searching for the QCD critical point in nuclear collisions*

17:35 - R. Maj -

18:00 END

Tuesday 4th

Chair: P. Seyboth

9:00 - G. Roland – *Review of the signals of deconfinement*

9:40 – D. Silvermyr – *Review on J/psi as a signal of deconfinement*

10:20 – E. Scomparin – *Dilepton production and the onset of deconfinement*

10:50 – Coffee break

11:20 – H. G. Ritter – *Prospects of energy scan program at RHIC*

12:00 – M. Gazdzicki – *A new SPS programme*

12:40 – R. Maj - *Towards Reliable Calculations of the Correlation Function*

13:05 - Lunch

Chair: M. Gazdzicki

14:30 – P. Senger - *CBM at FAIR*

15:10 – J. Mitchell - *PHENIX potential for search for the critical point*

15:40 – P. Sorensen – *STAR potential for search for the critical point*

16:10 – Coffee break

16:40 – C. Blume - *Review of Structures in the Energy Dependence of Hadronic Observables*

17:10 – D. Rohrich - *K/pi ratios versus baryon density*

17:40 – B. Tomasik - *The K/pi ratio and the lifespan of the fireball*

18:10 – P. Fachini - *Evidence for pion-pion scattering interactions in pp collisions*

18:35 – END

Wednesday 5th

Chair: U. Heinz

9:00 - M. Bleicher - *Longitudinal flow and onset of deconfinement*

9:40 - E. Shuryak - *Critical modes and hydrodynamics*

10:20 – D. Zschiesche- *Inhomogeneous freeze-out in relativistic heavy ion collisions*

11:00 Coffee break

11:30 – R. Snellings - *Energy dependence of directed and elliptic flow*

12:00 – H. Stoecker - *v1- & v2 barometry at HiMu-RHIC: pinning down the order of the phase transition*

12:30 – G. Stefanek - *Anisotropic Flow of Strange Particles at SPS*

13:00 LUNCH

Chair: H. Stocker

14:30 – V. Magas - *Bjorken hydrodynamics and gradual freeze out*

15:00 – K. Werner - *Energy dependence of hadron production in EPOS*

15:40 – F. Becattini – *Remarks on statistical model fits*

16:00 Coffee break

Chair: R. Stock

16:30 - J. Manninen - *Energy and system size dependence of freeze-out parameters*

17:00 - J. Cleymans - *Comparison of Chemical Freeze-Out Criteria in Heavy-Ion Collisions.*

17:30 – P. Steinberg - *Energy Dependence of Entropy Production*

18:00 – L. Moretto - *The Hagedorn Thermostat; new thermodynamics for the MIT bag*

18:30 END

Thursday 6th

Chair: J. Cleymans

9:00 U. Heinz - *Universal chemical freeze-out as a signature of a phase transition*

9:40 H. Satz - *Thermalization in strong interactions*

10:20 R. Stock - *The origin of grand-canonical equilibrium at hadron freeze-out in A+A collisions* (25 min. + 15 min. discussion)

11:00 Coffee break

11:30 L. Ferroni - *A test of statistical hadronization with exclusive rates*

11:55 S. Mrowczynski - *Early stage thermalization via instabilities*

12:35 M. Gorenstein - *Early stage thermalization from fluctuations*

13:15 Lunch

Free afternoon.

Excursions to Palazzo Vecchio and/or (depending on time) exhibition on Leonardo Da Vinci

20:30 Conference dinner
Villa Viviani

Correlations and fluctuations in relativistic nuclear collisions

Friday 7th

Chair: T. Trainor

9:00 Introduction

9:10 M. Tannenbaum - *Review of hard scattering and jet analysis*

9:50 N. Grau - *Jet Correlations from PHENIX: Low-pT to High-pT*

10:30 D. Kettler - *e+e- fragmentation functions*

11:10 Coffee break

11:40 D. Prindle (J. Porter) – *Correlations in pp collisions*

12:20 M. Daugherity - *Angular correlations in STAR*

13:00 Lunch

Chair: R. Lacey

14:20 D. Wei Li - *Angular correlations in PHOBOS*

14:45 D. Prindle – *Review of pt fluctuations and correlations*

15:25 V. Koch – *Fluctuations of conserved quantities*

16:05 Coffee break

16:35 T. Trainor - *Review of analysis methods for correlations and fluctuations*

17:15 V. Konchakovski - *Fluctuations in High Energy Nucleus-Nucleus Collisions from Microscopic Transport Approaches*

17:40 V. Begun - *Particle number fluctuations in statistical models: effects of quantum statistics, global conservation laws, and resonance decays*

18:05 Round table discussion (sec. P.Steinberg) - *Correlations in nuclear collisions, analysis methods*

18:35 END

Saturday 8th

Chair: V. Koch

9:00 C. Roland – *Fluctuations studies in NA49*

9:40 C. Loizides – *Fluctuations studies in PHOBOS*

10:20 S. Das – *Fluctuations studies in STAR*

11:00 Coffee break

11:30 J. Mitchell - *Fluctuation and Low Transverse Momentum Correlation Results from PHENIX*

12:10 M. Rybczinski – *System size dependence of multiplicity fluctuations in Relativistic Heavy Ion Collisions*

12:35 D. Kresan - *Simulations of the Event-by-Event Fluctuations of Particle Yields Ratios*

13:00 Lunch

Chair: G. Roland

14:30 J. Nystrand - *Measures of charged particle fluctuations*

15:00 C. Pajares – *Multiplicity, transverse momentum and forward-backward long range correlations*

15:25 W. Broniowski - *pT fluctuations and multiparticle clusters in heavy-ion collisions*

15:50 Coffee break

16:20 Round table discussion (sec. C. Pajares) - *Fluctuations in nuclear collisions*

16:50 R. Lacey - *What do elliptic flow measurements tell us about the matter created in the little bang at RHIC?*

17:30 J. Casalderrey Solana – *Hydrodynamic flow from fast particles*

18:00 Round table discussion (sec. J. Nystrand) – *Elliptic flow in nuclear collisions*

18:30 END

Sunday 9th

Chair: M. Tannenbaum

9:00 B. Alver - *Elliptic Flow Fluctuations at PHOBOS*

9:25 B. Lungwitz – *Energy dependence of multiplicity fluctuations in NA49*

9:50 D. Anchishkin – *High multiplicity influence on the pion-pion correlations in relativistic nuclear collisions*

10:15 Coffee break

10:45 A. Badala – *Soft physics in ALICE*

11:15 C. Zampolli – *Event by event physics in ALICE*

11:40 Round table discussion (sec. S. Das) – *Correlations and fluctuations theory: soft and hard processes in nuclear collisions*

12:10 G. Roland – *Summary talk*

12:50 Lunch