

26th Winter Workshop on Nuclear Dynamics 2010

Journal of Physics: Conference Series Volume 230

**Ocho Rios, Jamaica
2-9 January 2010**

Editors:

**Rene Bellweid
Scott Pratt**

Roy Lacey

**ISBN: 978-1-61738-737-1
ISSN: 1742-6588**

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2010) by the Institute of Physics
All rights reserved.

Printed by Curran Associates, Inc. (2010)

For permission requests, please contact the Institute of Physics
at the address below.

Institute of Physics
Dirac House, Temple Back
Bristol BS1 6BE UK

Phone: 44 1 17 929 7481
Fax: 44 1 17 920 0979

techtracking@iop.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

012001 Covariant Transport Approach for Strongly Interacting Partonic Systems	1
<i>W Cassing, E L Bratkovskaya</i>	
012002 Recent Results from FOPI from the Dynamics of Heavy Ion Collisions to the (Anti)Kaon-nucleon Potential	13
<i>Yvonne Leifels</i>	
012003 Particle Production at the SPS and the QCD Phase Diagram	22
<i>Christoph Blume</i>	
012004 Production and Elliptic Flow of Heavy Quarks at RHIC and LHC within a Partonic Transport Model	31
<i>Jan Uphoff, Oliver Fochler, Zhe Xu, Carsten Greiner</i>	
012005 Heavy Flavor Measurements using High-pT Electrons in the ALICE EMCal	39
<i>Mark T Heinz</i>	
012006 Overview of Open Heavy Flavor Measurements in STAR	48
<i>Sarah Lapointe</i>	
012007 Open Charm Meson Analysis in Proton-proton Collisions at the LHC with Alice	55
<i>G Ortona</i>	
012008 Reconstructed Jets at RHIC	62
<i>Sevil Salur</i>	
012009 Overview on Jet Results from STAR	69
<i>Elena Bruna</i>	
012010 Measurement of Jet Fragmentation p + p Collision at $\sqrt{s} = 200$ GeV with PHENIX Detector	75
<i>Yue-Shi Lai</i>	
012011 Strangeness Production in Jets from p+p $\sqrt{s} = 200$ GeV Collisions	83
<i>Anthony R Timmins</i>	
012012 On Fluctuations of Conserved Charges : Lattice Results Versus Hadron Resonance Gas	89
<i>Pasi Huovinen, Péter Petreczky</i>	
012013 QCD Thermodynamics on the Lattice: Approaching the Continuum Limit with Physical Quark Masses	93
<i>Z Fodor</i>	
012014 Deconfinement and Chiral Transition with the Highly Improved Staggered Quark (hisq) Action	103
<i>Alexei Bazavov, Peter Petreczky</i>	
012015 Lattice QCD and Hydro/Cascade Model of Heavy Ion Collisions	119
<i>Michael Cheng</i>	
012016 Phase Fluctuations Near the Chiral Critical Point	129
<i>Joseph Kapusta</i>	
012017 PHENIX and the Reaction Plane: Recent Results	136
<i>David L Winter</i>	
012018 Directed Flow of Identified Particles in Au + Au Collisions at $\sqrt{s_{NN}} = 200$ GeV	145
<i>Aihong Tang</i>	
012019 Investigation of Jet Quenching and Elliptic Flow Within a pQCD-based Partonic Transport Model	151
<i>Oliver Fochler, Zhe Xu, Carsten Greiner</i>	
012020 Search for Local Parity Violation with STAR ZDC-SMD	159
<i>Gang Wang</i>	
012021 Local Strong Parity Violation and New Possibilities in Experimental Study of Non-perturbative QCD	165
<i>Sergei A Voloshin</i>	
012022 Measurement of ϕ and ω at RHIC-PHENIX	173
<i>Misaki Ouchida</i>	
012023 The ALICE TPC: Status and Perspectives	180
<i>Hans Rudolf Schmidt</i>	
012024 A Gas of Bags: Weirdness and Criticality	191
<i>L G Moretto, J B Elliott, P T Lake, L Phair</i>	

012025 Recent Results of Fluctuation and Correlation Studies from the STAR Experiment	199
<i>Terence J Tarnowsky</i>	
012026 Collective Effects in Proton Proton and Heavy Ion Scattering, and the "Ridge" at RHIC.....	205
<i>K Werner, Iu Karpenko, T Pierog</i>	
012027 Kinetic Theory Based Modeling of Type II Core Collapse Supernovae.....	212
<i>Terrance Strother, Wolfgang Bauer</i>	
012028 Astrophysically Important Reactions and Nucleosynthesis Processes.....	221
<i>Karlheinz Langanke</i>	
012029 The Relationship Between the Soft and Hard Ridges	234
<i>George Moschelli, Sean Gavin</i>	
012030 Forward-backward Multiplicity Correlations for Identified Particles in Au+Au 200 GeV Collisions	244
<i>Michael Skoby</i>	
012031 Studying the Jet Medium Interaction by Two Particle $\Delta\eta$-$\Delta\phi$Correlations	249
<i>Chin-Hao Chen</i>	
012032 Dileptons from the Nonequilibrium Quark-gluon Plasma	255
<i>E L Bratkovskaya, O Linnyk, W Cassing</i>	
012033 Calculations of Direct Photon Emission in Heavy Ion Collisions at $\sqrt{s_{NN}} = 200$ GeV	263
<i>B Bäuchle, M Bleicher</i>	
012034 Dilepton Continuum at PHENIX.....	269
<i>Sarah Campbell</i>	
012035 Jets Associated with Z^0 Boson Production in Heavy-ion Collisions at the LHC.....	278
<i>R B Neufeld</i>	
012036 Recent STAR Results in High-energy Polarized Proton-proton Collisions at RHIC.....	284
<i>Bernd Surrow</i>	
012037 A Fundamental Test of the Higgs Yukawa Coupling at Rhic in A+A Collisions.....	294
<i>M J Tannenbaum</i>	
012038 Muon Trigger Upgrade at PHENIX.....	306
<i>I Nakagawa</i>	
012039 Highlights of the PHENIX Transverse Spin Physics.....	312
<i>Ming X Liu</i>	
012040 Longitudinal Spin Physics with the PHENIX Detector at RHIC.....	318
<i>David Kawall</i>	
012041 Transverse Spin Physics at STAR	326
<i>Len K Eun</i>	
012042 Quarkonia Measurements with ALICE.....	332
<i>Frederick Kramer, Christoph Blume</i>	
012043 Forward Calorimeter Upgrades in PHENIX: Past and future	342
<i>Richard S Hollis</i>	
012044 Year-1 (heavy-ion) Physics with CMS at the LHC.....	350
<i>Edwin Norbeck, Yasar Onel</i>	
012045 Relativistic Shock Waves and Mach Cones in Viscous Gluon Matter.....	356
<i>Ioannis Bouras, Etele Molnár, Harri Niemi, Zhe Xu, Andrej El, Oliver Fochler, Francesco Lauciello, Carsten Greiner, Dirk H Rischke</i>	
012046 Third-order Dissipative Hydrodynamics from the Entropy Principle	362
<i>Andrej El, Zhe Xu, Carsten Greiner</i>	
Author Index	