

Abstract Submitted  
for the APR10 Meeting of  
The American Physical Society

**Results from the lowest energy ( $\sqrt{s_{NN}} = 9.2$  GeV) collisions at RHIC** LOKESH KUMAR<sup>1</sup>, STAR COLLABORATION — In order to search for the QCD critical point and explore the QCD phase Diagram, RHIC will soon begin a detailed Beam Energy Scan. The plan is to collide ions at various center-of-mass energies so as to explore the plane of temperature vs. baryon chemical potential. In preparation for the first major period of Energy Scan running, a short Au + Au test run at  $\sqrt{s_{NN}} = 9.2$  GeV was conducted in the year 2008. The large-acceptance STAR detector collected about 3000 good events and results based on this data set will be presented. We will present results on the centrality dependence of identified particle (pion, kaon and proton) transverse momentum spectra, midrapidity multiplicity density ( $dN/dy$ ), average transverse momentum ( $\langle p_T \rangle$ ) and particle ratios. We will specifically discuss the energy dependence of the  $K/\pi$  ratio, and compare to various available model calculations. The identified particle ratios and  $p_T$  spectra will be used to extract chemical and kinetic freeze-out parameters, based on a thermal model fits to the data. The extracted freeze-out temperatures and baryonic chemical potential will also be compared with estimates from lower and higher beam energies. Finally, a brief overview of STAR's proposed plan for the Beam Energy Scan at RHIC will be presented.

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Date submitted: 22 Oct 2009

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