Strangeness production in $\sqrt{s_{NN}} = 200GeV$ AuAu collisions at RHIC

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The BRAHMS (Broad RAnge Hadron Magnetic Spetrometers)[1] experiment has two magnetic spectrometers as well as detectors for global event characterization [2]. It is unique at RHIC in its ability to measure charged particles over a wide range in rapidity and transverse momentum. Operating the spectrometer arms at various angles makes it possible to extend our measurements from rapidity $y \approx 0$ up to $y \approx 3.5 - 4$ depending on particle species.

The BRAHMS collaboration has measured charged kaon spectra from AuAu collisions at $\sqrt{s_{NN}} = 200GeV$. Rapidity dependent particle ratio's were described in [3]. Here we will discuss the dependence of rapidity densities as function of centrality and rapidity. Yields are extrapolated to 4π and K/π deduced. Recent results on Λs will be presented. BRAHMS' results are compared to lower energies, other RHIC experiments and models.

References

[1] http://www4.rcf.bnl.gov/brahms
[2] M. Adamczyk et al., Nucl. Instr. Meth. A 499 (2003) 437
[3] Phys. Rev. Lett. 90, 102301 (2003)