## Abstract Submitted for the APR10 Meeting of The American Physical Society

Charged hadron spectra in Cu+Cu collisions at 22.4 GeV with STAR at RHIC¹ ORPHEUS MALL, STAR Collaboration - UC Davis, STAR COLLABORATION — STAR has studied heavy ion collisions of Au+Au and Cu+Cu at different energies in order to probe the QGP phase boundary as a function of T and  $\mu_B$ . We present a study of the Cu+Cu 22.4 GeV test run at the RHIC injection energy with  $\sim 1$  million good events. Particle spectra are presented for  $\pi\pm$ ,  $K\pm$ , p and  $\bar{p}$  versus  $m_T-m_0$  for |y|<0.1 at various collision centralities. We present the integrated yield dN/dy,  $\langle p_T \rangle$  and particle ratios as a function of centrality. Kinetic freeze-out properties will be studied via blast-wave model fits to the spectra. Chemical freeze-out properties will be studied using a statistical model fit of the ratios to determine  $T_{ch}$  and  $\mu_B$ . Results are compared with RHIC and world data for other energies and species.

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