Event-by-event $K/\pi$ Fluctuations at RHIC GARY WESTFALL,
Michigan State University, STAR COLLABORATION — We present the first re-
sults from measurements of event-by-event fluctuations in the $K/\pi$ ratio for Au+Au
collisions at $\sqrt{s_{NN}} = 20, 62.4, 130$ and 200 GeV at the Relativistic Heavy Ion Col-
lider using the STAR detector. We observe that dynamical fluctuations in the $K/\pi$
ratio decrease as the collisions become more central. The excitation function for
dynamical fluctuations in the $K/\pi$ ratio in central collisions will be presented. The
results will be compared with similar fluctuations measured at SPS energies.