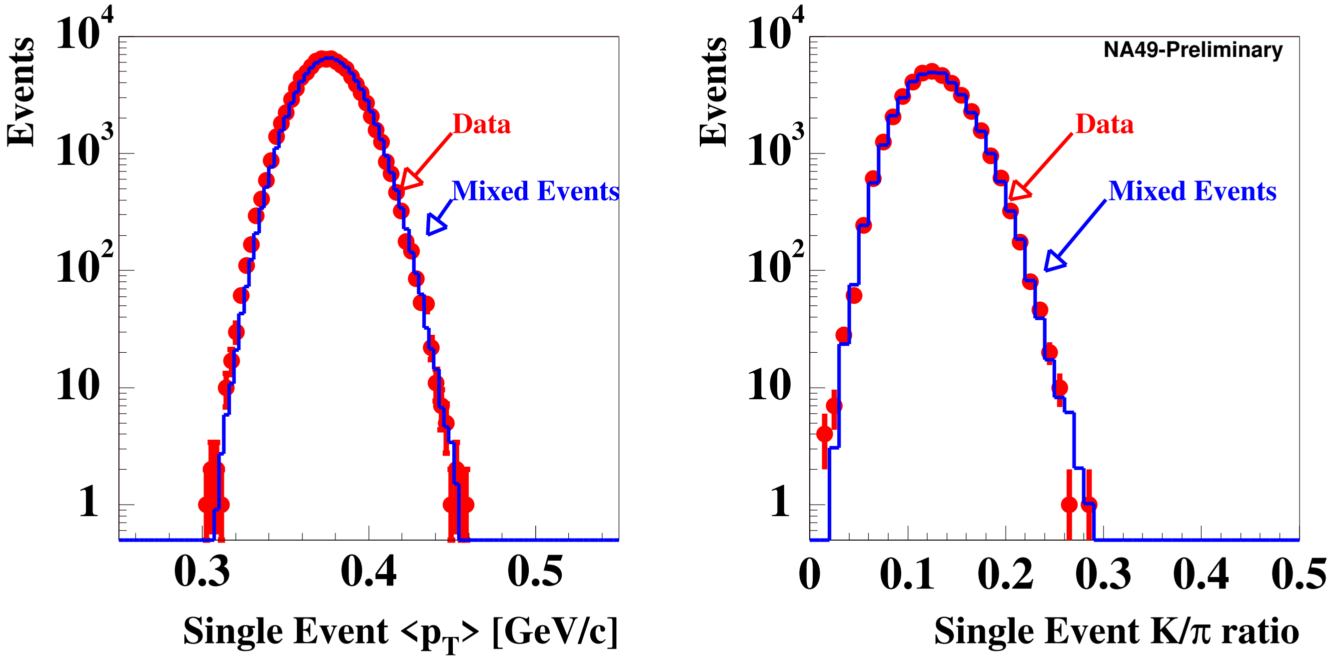
Event-by-Event Fluctuations in Pb+Pb Collisions

probe equilibration and thermodynamical properties
of produced matter

$\langle p_T \rangle$: temperature,kinetic equilibration
K/π : strangeness content,flavor equilibration



measured fluctuations reproduced by mixed events
(number statistics)

90% c.l. upper limits for dynamical fluctuations:
1.2% in $\langle p_T \rangle$, 2.8% in K/π

events very uniform, expected with transient QGP phase
no distinct event classes

current theoretical work: can size of charge, N_K, $N_{\bar{p}}$
fluctuations discriminate hadronic from QGP scenario ?