quantitative measure of $\langle p_T \rangle$ fluctuations:

$$\Phi_{p_T} = \sqrt{\frac{\langle Z^2 \rangle}{\langle N \rangle}} - \sqrt{\overline{z^2}} \qquad Z = \sum_{i=1}^{N} z_i \qquad z_i = p_{Ti} - \overline{p_T}$$

designed to remove the effect of Poisson fluctuations

Result: $\Phi_{p_T} = 0.6 \pm 1.0 MeV/c$

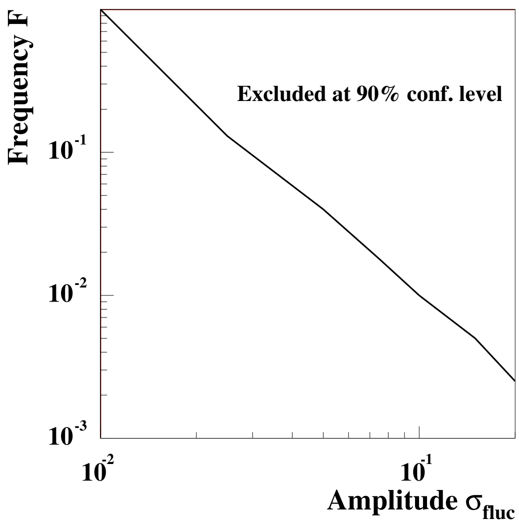
cancelling contributions from BE correlations $(5 \pm 1.5 MeV/c)$

2-track resolution $(-4 \pm 0.5 MeV/c)$

quantitative limits from fluctuation model :

$$P(x) = 1/\sqrt{2\pi\sigma^2_{fluc}} \cdot exp(-(x-1)^2/(2\sigma^2_{fluc}))$$

scaling of momenta by factor x drawn from P(x) event-by-event



limit on production of DCC:

deviation from isospin symmetry in pion charges at small p_T

$$P(f) = \frac{1}{2\sqrt{f}} \qquad f = N_{\pi^0}/(N_{\pi^+} + N_{\pi^-} + N_{\pi^0})$$

Fluctuating charged π multiplicity with $p_T < m_\pi$ according to $P(f)$ in domain ξ leads to increase of $\langle p_T \rangle$ fluctuations

$\Longrightarrow$ upper limit $\xi < 3.5\%$