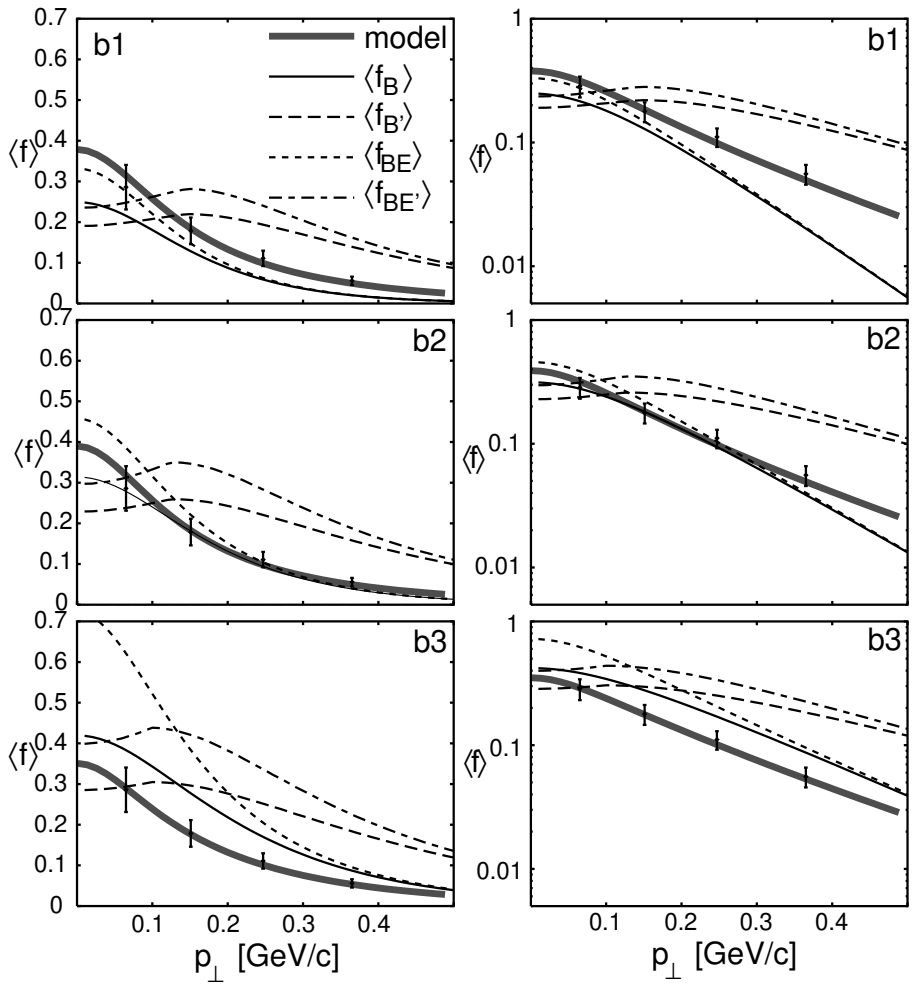
Estimate of phase-space density of pions:

calculated from BE-correlation and inclusive-spectra parameters

$$\langle f \rangle(\vec{p}) = \frac{\sqrt{\pi}}{2} \frac{\sqrt{\lambda}}{E \cdot T_{inv}^2(y)} exp(-\frac{p_\perp}{T_{inv}}) \frac{dN}{dy} \frac{1}{R_s(p)\sqrt{R_o^2(p) R_l^2(p) - (R_{ol}^2)^2}}$$



phase-space density and π-multiplicity exceed thermal values

inferred chemical potential $\mu_\pi = 60 MeV$ at $T_{fo} = 100 MeV$

π-multiplicity corresponds to chemical freeze-out at T = 170 MeV