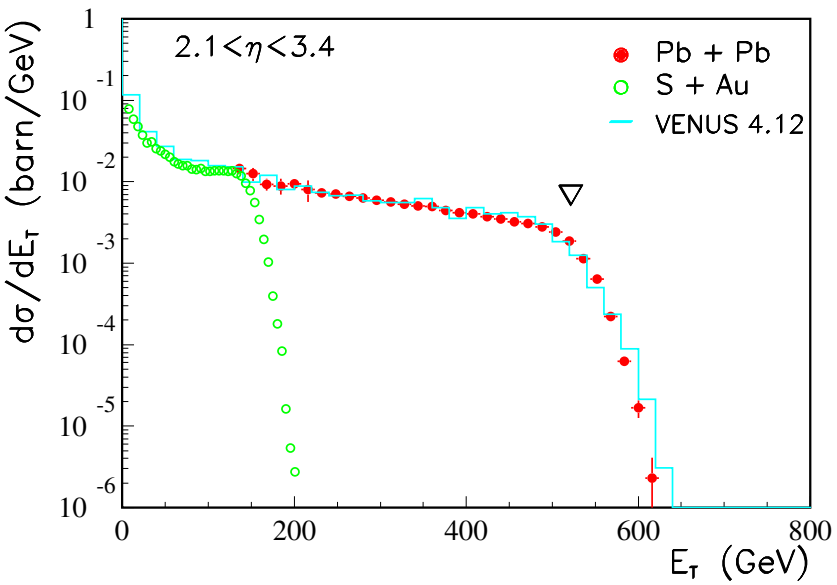
Initial Energy Density

calorimetric measurement of transverse energy flow at midrapidity (NA49)



Bjorken model of scaling logitudinal expansion (consistent with BE-correlation measurements)

$$\epsilon = (dE_T/d\eta)/(\pi \cdot R^2 \cdot \tau_0)$$

$$\tau_0 = 1 \text{ fm/c}, \text{ R} = 1.12 \cdot A^{1/3} \text{ fm}$$

reaction	ϵ [GeV/fm^3]	ref
S+S	1.3	NA35
S+Au	2.6	NA35
Pb+Pb	3.2	NA49

energy densities reached at SPS exceed QGP threshold predicted by lattice QCD