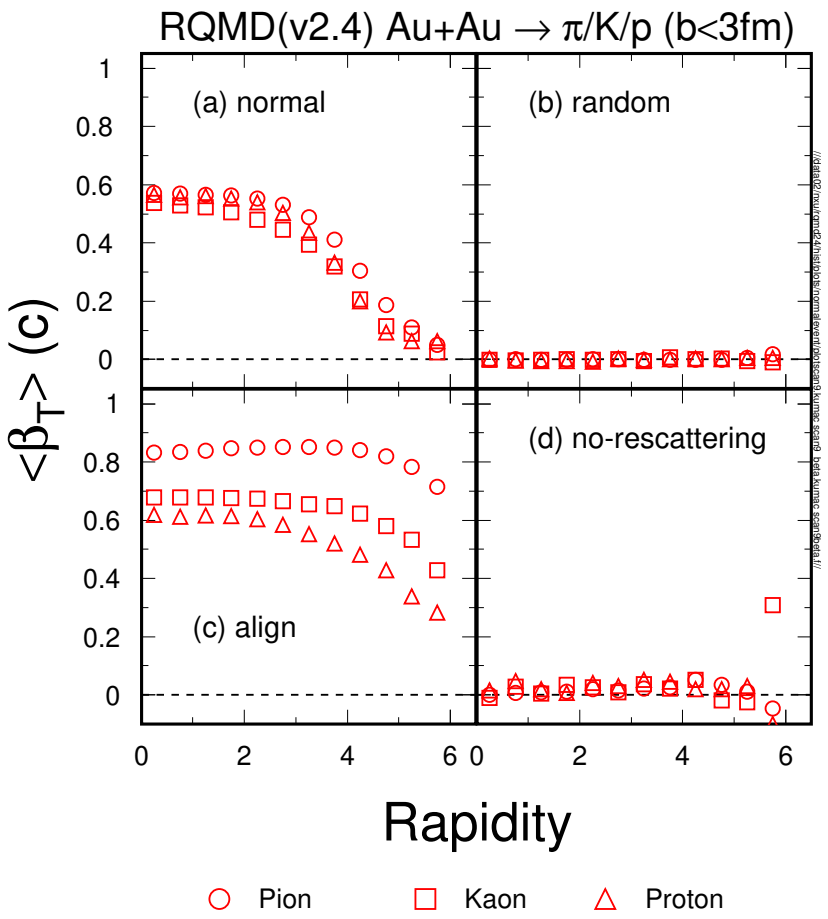
The collective velocity β_T as a function of rapidity



$$\beta_T = \frac{\vec{p_T} \cdot \vec{r_T}}{r_T m_T}$$

- Pions, Kaons, and protons are flowing together → Collectivity!
- Space-momentum correlation in particles represents the collective flow. Once such correlation is removed, or '*randomized*', the velocity β_T valishes;
- Maximum transverse flow is reached by the alignment of the space and momentum vectors. See plot (c).
- Rescattering is the source of collective flow or, in other words, the space-momentum correlation. Reduced number of rescattering lead to zero β_T for all particles. See plot (d).