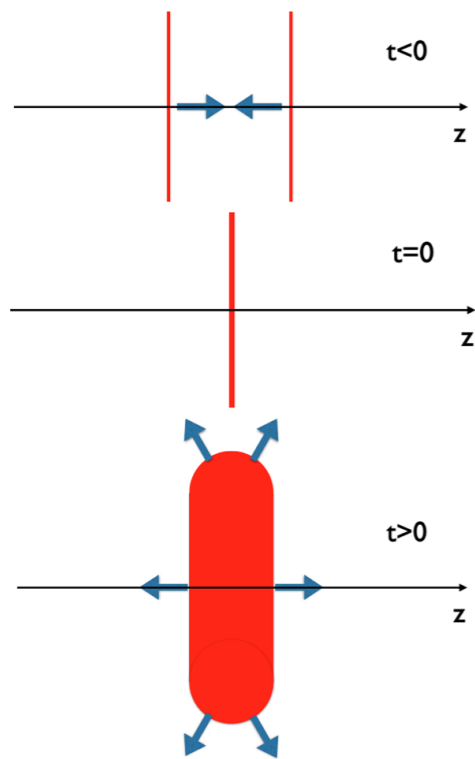


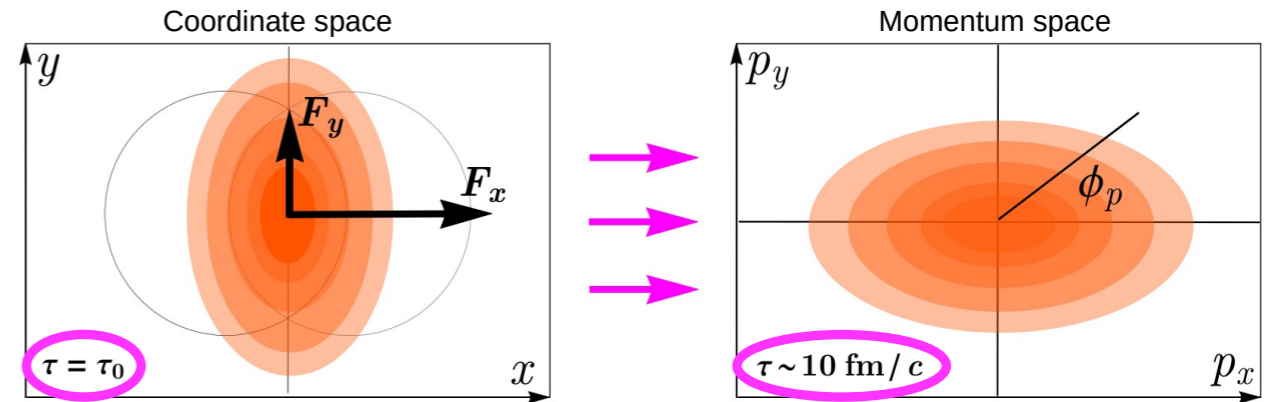
Imaging nuclear structure at the LHC

© Relativistic ion collisions (e.g. @ LHC)

[Ollitrault 2023]

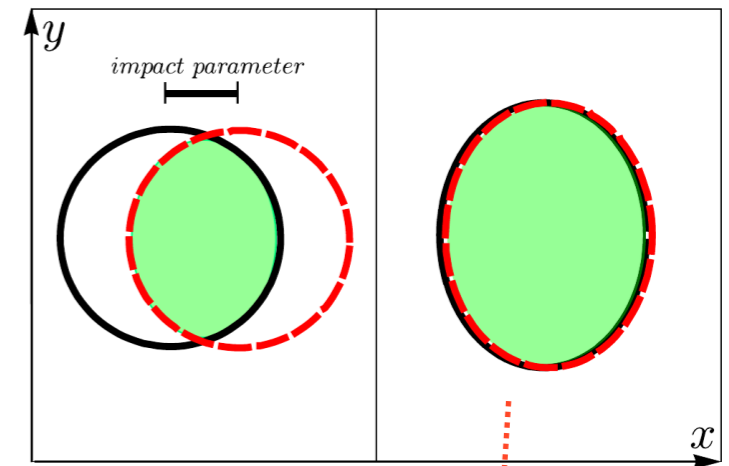


transverse plane

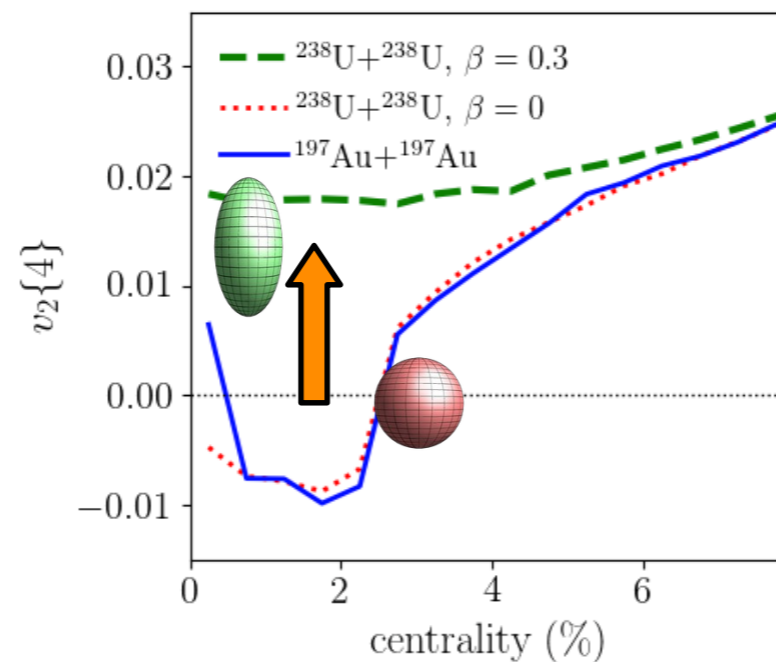
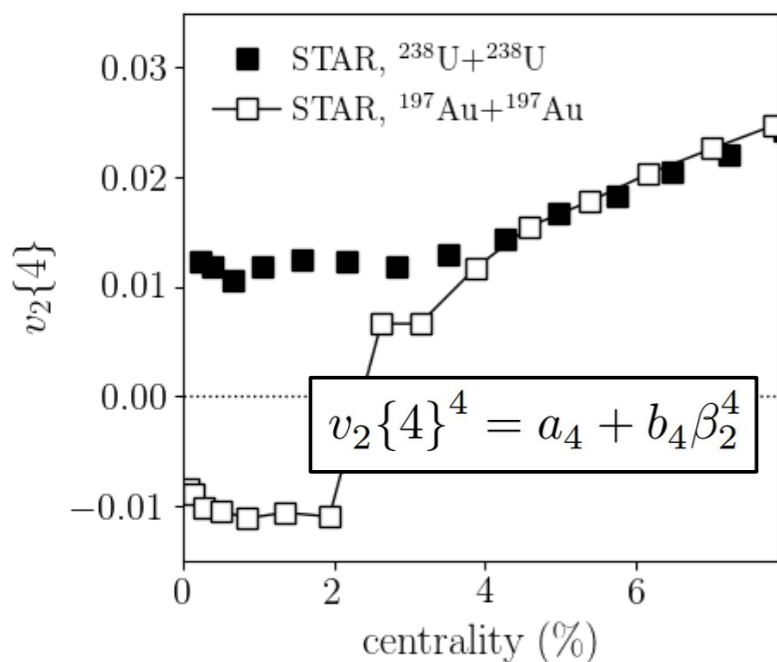


sources of initial anisotropy

non-central collisions



deformed nuclei

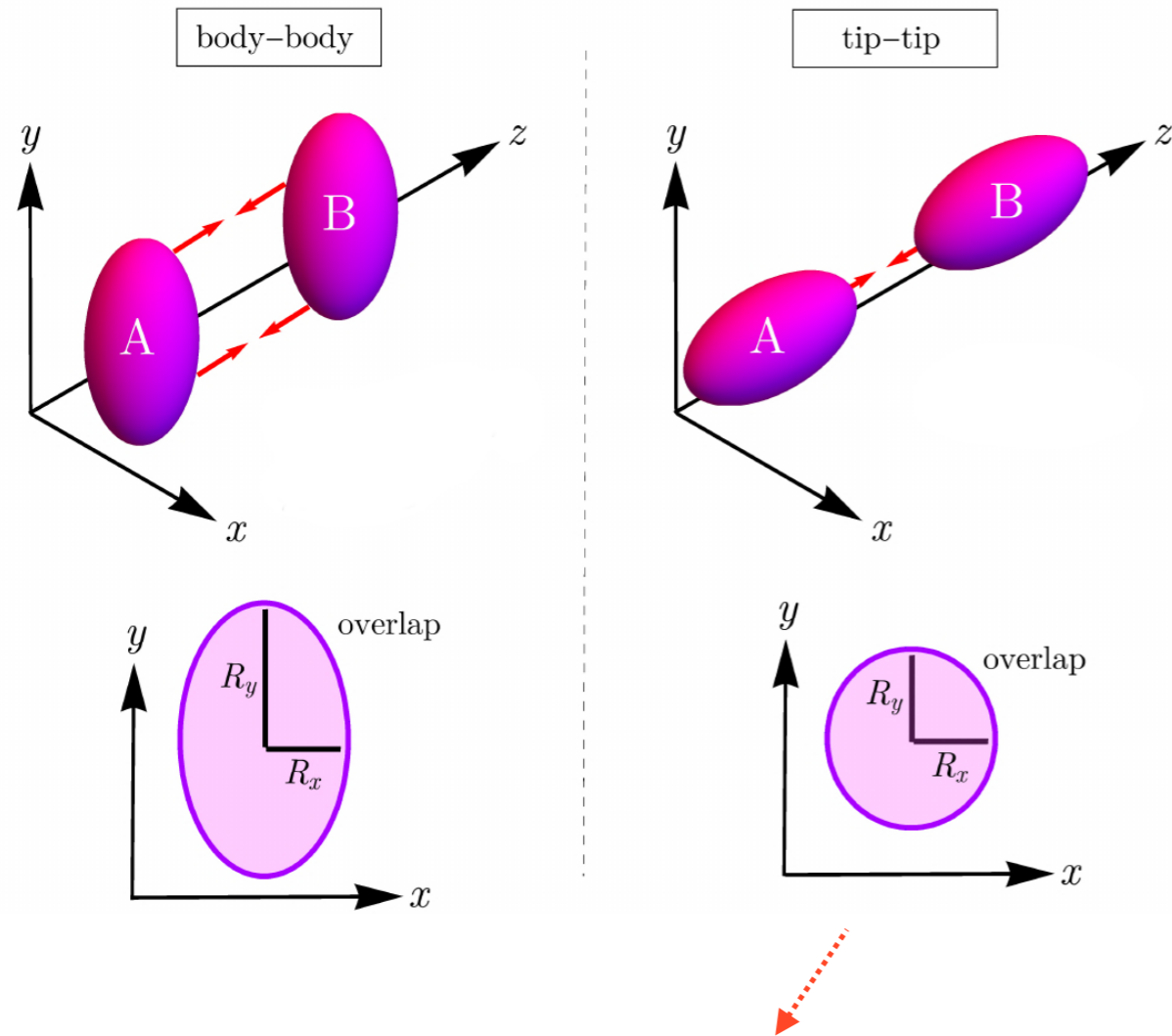


Clearly visible in exp. data!

[Giacalone 2019]

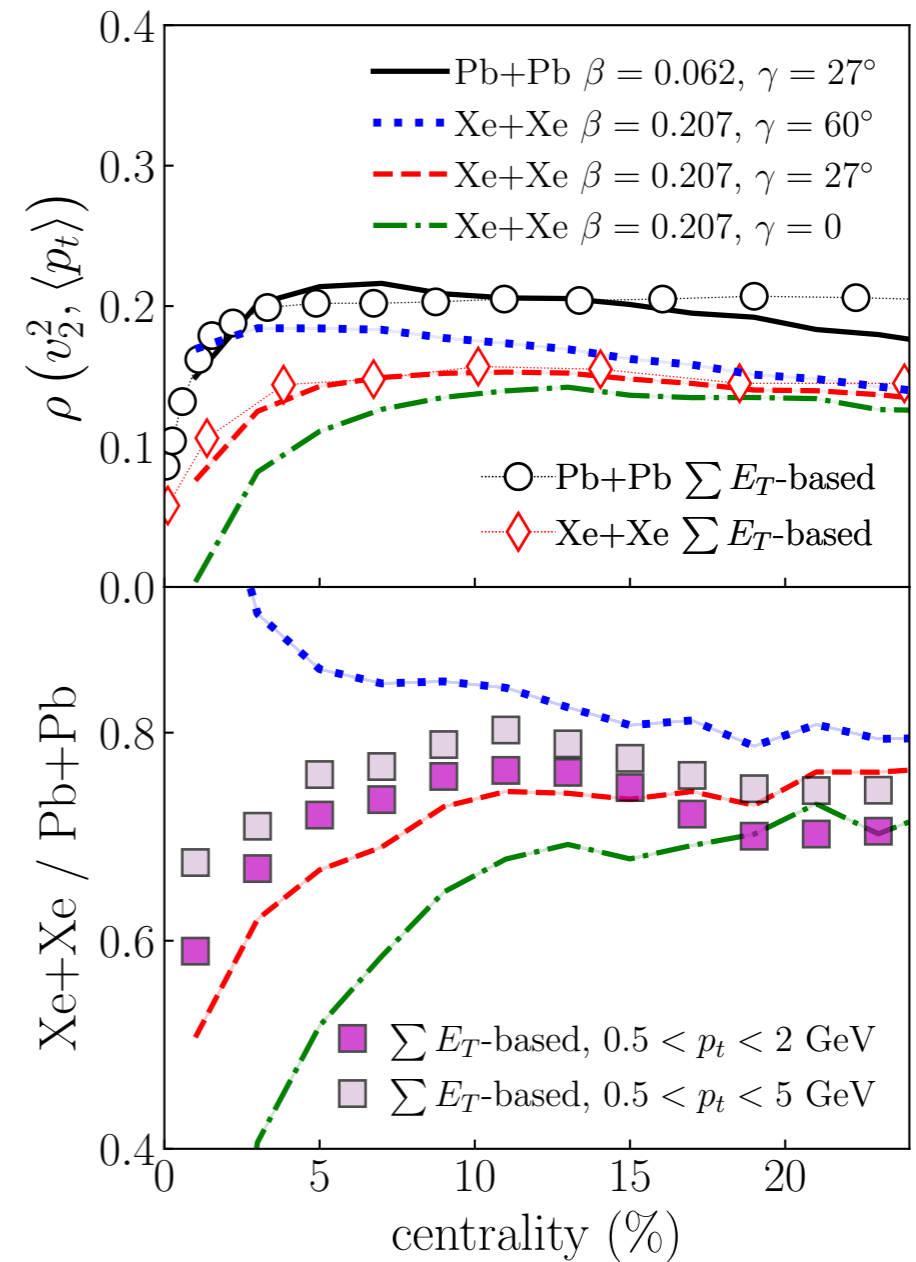
Imaging nuclear structure at the LHC

© Prolate vs oblate deformation



more “explosive” expansion → larger $\langle p_T \rangle$

correlation between anisotropy & $\langle p_T \rangle$



[Bally *et al.* 2022]

→ Determination of nuclear shape consistent with low-energy nuclear structure!