Status of DNP 2022 Abstract: “Results from a modified $R_{\Psi 2}$ observable in isobar collisions at STAR”

- $R_{\Psi 2}$ observable for Chiral Magnetic Effect (CME) search in isobar breaks each event into two subevents.
  - $R_{\Psi 2}$ uses a single shuffled charge separation (ΔS) distribution for normalization, whereases the modified $R_{\Psi 2}$ uses two ΔS distributions.
  - $R_{\Psi 2}$ averages ΔS from the two subevents, whereas the modified $R_{\Psi 2}$ treats them separately.
  - We have compared $R_{\Psi 2}$ and the modified $R_{\Psi 2}$. There is a considerable difference, and these findings were presented at FCV and CME meeting a few weeks ago
- Use Event Shape Engineering (ESE) to look at how $R_{\Psi 2}$(both modified and unmodified) depends on v2 and q2.
  - Ongoing, hopefully ready for CME meeting this Friday (7/1) and FCV next Wednesday (7/6)
- Resource Request: NONE, that we can think of