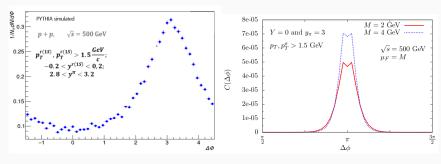
## STUDY OF UPSILON-PION AZIMUTHAL CORRELATION

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## PREDICTIONS AND SIMULATIONS

- The aim is to study production mechanism of Upsilon
- The bound state is formed through color-singlet or color-octet channel



**Figure 1:** Upsilon-Pion azimuthal correlation using PYTHIA Generator.

Taken from: O. Mezhenska, SOM 2024.

Figure 2: The correlation function  $C(\Delta\varphi)$  in p+p collision at  $\sqrt{s}$  = 500 GeV.

Taken from: E. Basso et al., PoS, EPS-HEP2015, 191 (2016).

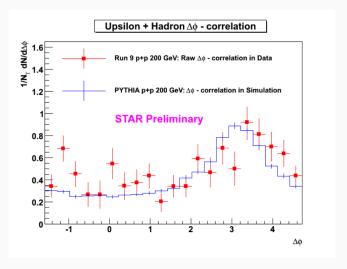


Figure 3: Upsilon-Hadron azimuthal correlation measured by STAR.

Taken from: M. C. Cervantes, J. Phys.: Conf. Ser. 316 012023 (2011).