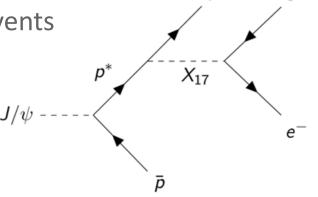
Search for $J/\psi \to p \overline{p} e^+ e^-$ Decays with the BESIII Experiment

■ BESIII holds world's largest J/ψ dataset on resonance with 10 billion events



Ideally suited for the search for rare decays!



- $J/\psi \rightarrow p\bar{p}e^+e^-$ decays are interesting in both BSM and SM contexts
 - Search for the X17 Krasznahorkay, PRL 116 (2016), 1910.10459, 2209.10795
 - Measure the time-like proton form factor in the unphysical region Lin, Guo, Meißner, arXiv:2309.07850v2
 - Study the transition form factor of the X(1835) to evaluate its internal structure Jiang, 10.1016/j.nuclphysbps.2021.05.019
- But: decay has not been measured yet!



