

## **(online) Prospects for measurement of the dijet transverse momentum decorrelation spectrum at Belle II**

*Friday, 1 July 2022 16:00 (30 minutes)*

Jets are expected to play an important role in nucleon structure measurements at current and near-future collision experiments. In order to effectively use jets for such analyses, their properties need to be understood across a wide range of energies. While high energy hadron collision experiments have been studying jet physics for many years, the extension to much lower energies remains relatively unexplored. Belle II is a next generation B-factory, observing electron-positron collisions at a center of mass energy around 10.6 GeV. We perform measurements of jet observables at the Belle II experiment to provide measurements of jet observables at these energies. The clean environment of Belle II is expected to allow us to constrain nonperturbative aspects of jets. In particular, we present the current status of ongoing measurement of the transverse momentum decorrelation spectrum in dijet events, which can be compared to recently published theoretical results in order to establish the validity of such calculations at lower energies.

**Primary author:** SCHNEIDER, Simon (Duke University)

**Presenter:** SCHNEIDER, Simon (Duke University)

**Session Classification:** Short