

# All-Order Merging of High Energy and Soft-Collinear Resummation

Thursday 4 August 2022 09:15 (25 minutes)

We present a method of merging the exclusive LO-matched high energy resummation of High Energy Jets (HEJ) with the parton shower of Pythia which preserves the accuracy of the LO cross sections and the logarithmic accuracy of both resummation schemes across all of phase space. Predictions produced with this merging prescription are presented with comparisons to data from previous experimental studies and suggestions are made for further observables and experimental cuts which highlight the importance of both high energy and soft-collinear effects.

#### Preferred track

Forward & Diffractive Physics

#### Subfield

HEP theory

## Attending in-person?

Yes

### On behalf of collaboration?

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