Strange particle in jets and underlying events with different models

3 1 Simulate with PYTHIA 8 rope

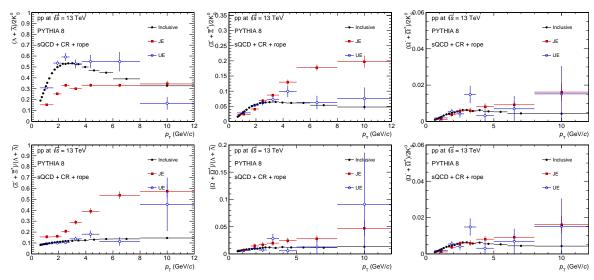


Figure 1: Baryon-to-meson(top) and baryon-to-baryon ratio with PYTHIA rope.

4 Parameters

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- 5 Beams:idA = 2212
- 6 Beams:idB = 2212
- 7 Main:numberOfEvents = 1001
- 8 Beams:eCM = 13000.
- 9 SoftQCD:all = on

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- 11 MultiPartonInteractions:pT0Ref = 2.15
- BeamRemnants:remnantMode = 1
- 13 BeamRemnants:saturation = 5
- 14 ColourReconnection:reconnect = on
- 15 ColourReconnection:mode = 1
- ¹⁶ ColourReconnection:allowDoubleJunRem = off
- 17 ColourReconnection:m0 = 0.3
- 18 ColourReconnection:allowJunctions = on
- ¹⁹ ColourReconnection:junctionCorrection = 1.2
- 20 ColourReconnection:timeDilationMode = 2
- 21 ColourReconnection:timeDilationPar = 0.18
- 23 Ropewalk:RopeHadronization = on
- 24 Ropewalk:doShoving = on

Ropewalk:tInit = 1.5Ropewalk:deltat = 0.0526 Ropewalk:tShove = 0.127 Ropewalk:gAmplitude = 0. 29 Ropewalk:doFlavour = on 30 Ropewalk:r0 = 0.531 Ropewalk:m0 = 0.232 Ropewalk: beta = 0.133 34 !// Enabling setting of vertex information. PartonVertex:setVertex = on 36 PartonVertex:protonRadius = 0.7 37

PartonVertex:emissionWidth = 0.1

39 References