Min-Bias Physics: Jet Evolution & Event Shapes

Plot 1: \(<\text{Nchg}(\text{jet#1})>\) vs \(\text{PT}(\text{charged jet#1})\):

Plot shows the average number of charged particles (\(\text{PT} > 0.5\) GeV, \(|\eta| < 1\)) within the leading charged jet (\(R = 0.7\)) as a function of the PT of the leading charged jet. The errors on the (uncorrected) data include both statistical and correlated systematic uncertainties. The QCD “hard scattering” theory curves (Herwig 5.9, Isajet 7.32, Pythia 6.115) are corrected for the track finding efficiency and have an error (statistical plus systematic) of around 5%.