Abstract

When electron and positron beams collide inelastically, large number of secondary particles are produced from intermediate pairs like lepton-antilepton and quark-antiquark. These secondary particles evolve to a very small energy scale where visible hadrons are produced. At such an energy scale perturbation theory cannot be applied for the study of hadronic production. Instead a model based study is found to be useful. Major components of the model based methodology include Monte Carlo generators employing fragmentation models, detector simulation toolkits like GEANT4 and data analysis tools. These components form backbone of fragmentation study of the hadronic production.