



XLVII International Symposium on
Multiparticle Dynamics (ISMD2017)
September 11-15, 2017, Tlaxcala City, Mexico

Contribution ID : 30

Type : **not specified**

Asymptotic Analysis of the parton branching equation at LHC Energies

Friday, 15 September 2017 12:40 (0:25)

Content

An asymptotic solution to the QCD parton branching equation is derived using the method of Laplace transformation and saddle point approximation. The distribution is applied to charged particle multiplicity distributions in proton-proton collisions at $\sqrt{s} = 0.9, 2.36,$ and 7 TeV for $|\eta| < 0.5, 1.0, 1.5, 2.0, 2.4,$ and 8 TeV for $|\eta| < 0.5, 1.0, 1.5,$ as well as 13 TeV data for $|\eta| < 0.8$ and 2.5 .

Session

Multiparticle correlations and fluctuations

Primary author(s) : Dr. WANG, WEI YANG (National University of Singapore)

Co-author(s) : Prof. CHAN, Phil (National University of Singapore, NUS)

Presenter(s) : Dr. WANG, WEI YANG (National University of Singapore)

Session Classification : Multiparticle correlations and fluctuations: from small to large systems (II)