

Contribution ID: 7 Type: not specified

Gluon Radiation off Heavy Flavour Jets

Friday 17 January 2014 12:35 (15 minutes)

Gluon emission spectrum off heavy flavour (HF) jet is suppressed in the forward direction due to the well-known 'Dead Cone Effect'. We endeavour to explore the effect of non-eikonality (bent path of HF) on the gluon emission spectrum of heavy quark and show that when the heavy quarks are allowed to bend, additional gluons turn up along the direction of propagation of HF. Hence this study, on one hand, helps remove the prevalent eikonal approximation in jet-quenching models and on the other hand revisits the notion of dead-cone within the non-eikonal regime.

Author: BHATTACHARYYA, Trambak (V)

Co-authors: ABIR, Raktim (Saha Institute of Nuclear Physics); MAZUMDER, Surasree (Variable Energy Cy-

clotron Centre, Kolkata)

Presenter: BHATTACHARYYA, Trambak (V)