Contribution ID: **173**   Type: **Oral presentation**

Variable flavor number scheme for final state jets

Wednesday 30 April 2014 15:40 (20 minutes)

We discuss a variable flavor number scheme for final state jets which can account for the effects of arbitrary finite quark masses for inclusive jet observables. The scheme is a generalization of the ACOT variable flavor number scheme with additional dynamical scales. It is based on a consistent description of massive collinear and soft modes allowing also for a treatment of rapidity divergences. We emphasize general properties, the calculations of threshold corrections, consistency conditions and relations to mass singularities found in fixed-order massive calculations. Specific examples covered are massive quark effects in event shapes and DIS.

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Session Classification: WG1: Structure Functions and Parton Densities

Track Classification: WG1: Structure Functions and Parton Densities