



Contribution ID: 1523

Type: **Poster**

Treating jet correlations in high pile-up at hadron colliders

Monday, 8 August 2016 18:30 (2 hours)

Experiments in the high-luminosity runs at the Large Hadron Collider face the challenges of very large pile-up. Primary techniques to deal with this are based on precise vertex and track reconstruction. Outside tracker acceptances, however, lie regions of interest for many aspects of the LHC physics program. We explore complementary approaches to pile-up treatment and propose a data-driven jet-mixing method which can be used outside tracker acceptances without depending on Monte Carlo generators. The method can be applied to treat correlation observables and take into account, besides the jet transverse momentum pedestal, effects of hard jets from pile-up.

Primary author: VAN HAEVERMAET, Hans (University of Antwerp (BE))

Co-authors: HAUTMANN, Francesco (Institute of Theoretical Physics); JUNG, Hannes (Deutsches Elektronen-Synchrotron (DE))

Presenter: VAN HAEVERMAET, Hans (University of Antwerp (BE))

Session Classification: Poster Session

Track Classification: Strong Interactions and Hadron Physics