Contribution ID: **704** Type: **Parallel**

Monojet signatures at the High-Luminosity and High-Energy LHC

Thursday 5 July 2018 18:30 (15 minutes)

In some class of BSM models, such as SUSY , DM may be searched using high pT jets + missing ET, where DM (X) may be
produced from the decay of a heavy particle H. If mH is close to mX, the signature is ISR , and may be monojet like, and there are much
information on the nature of H and X. I will discuss leading jet distribution contains the information of both mH, color representation
and spin of the particles, but to extract the information fully, one need to predict the distribution with less than 10% accuracy
for the parameter region that may be studied at HL-or HE-LHC. Then I turn into the theoretical error in the current best NLO MC
based on MC@NLO scheme, such as MG5 and Sherpa, and discuss if such accuracy can be achieved.

Primary author: Prof. NOJIRI, Mihoko (Theory Center, IPNS, KEK)

Presenter: Prof. NOJIRI, Mihoko (Theory Center, IPNS, KEK)

Session Classification: Beyond the Standard Model

Track Classification: Beyond the Standard Model