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Study the impact of pile-up jets in the MET reconstruction for the forward region at the ATLAS experiment

Tuesday, 26 June 2018 15:00 (2 hours)

In 2017 and 2018 data taking in the ATLAS detector at LHC, the average bunch crossing per collision is much higher than before. Thus the pile-up effect is much stronger, which will
significantly affect the MET reconstruction. In the MET reconstruction, the forward jet, which is hardly distinguished from the pile-up jet, will cause a large MET resolution. This presentation will introduce the study that how the transverse momentum threshold and the jet vertex fraction tagger (JVT) can improve the MET resolution in the high pile-up situation.

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