DeXTer: Deep Sets based Neural Networks for Low-p_T $X \to b\bar{b}$ identification in ATLAS YUAN-TANG CHOU, University of Massachusetts Amherst, ATLAS COLLABORATION — This work presents algorithms for flavor tagging identification of jets that are initiated by one or two independent heavy-flavor hadrons. Algorithms in ATLAS for hadronic jets typically focus on high transverse momentum, above 200 GeV. This work describes the first implementation of a double-b tagger for low transverse momentum jets, below 200 GeV. This algorithm relies on large radius track-jets which can be defined at low transverse momenta and implements a DeepSets neural network that uses displaced tracks, secondary vertices, and substructure information to identify the presence of multiple heavy-flavored hadrons.

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