

Abstract Submitted  
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**A Template Measurement of the Top Quark Angular Distribution Using Boosted Lepton + Jets Events** NICK EMINIZER, Johns Hopkins Univ, CMS COLLABORATION<sup>1</sup> — We present a template-based technique for measuring the angular distribution of top quark pairs decaying semileptonically using data collected by the CMS experiment at the LHC. The analysis is optimized for high-momentum “boosted” decays wherein the hadronically decaying top quark’s jets become either partially or fully merged, and the final state lepton is not necessarily isolated from nearby jets. The technique can be used to examine multiple physics processes affecting the angular distribution of top pairs, including the parton-level top quark forward-backward asymmetry  $A_{FB}$  and anomalous chromoelectric/chromomagnetic moments.

<sup>1</sup>CMS is the Compact Muon Solenoid experiment at the Large Hadron Collider

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