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## Studies of b-quark jet shapes using top decays with ATLAS

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A measurement of jet shapes in  $t\bar{t}$  final states using data recorded by the ATLAS detector is presented. Samples of events with top-quark pairs are selected in both the semileptonic and dileptonic decay modes and the differential and integrated shapes of the b-quark jets resulting from the top-quark decays are compared with those of the light-quark jets from the hadronic W-boson decays  $W \rightarrow q\bar{q}'$  in the semileptonic channel. The main observation is that b-quark jets have a wider distribution of the momentum flow inside the jet cone than light-quark jets.

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