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Unfolding techniques in the ATLAS top differential cross-section measurement TAYLOR CHILDERS, CERN, ATLAS COLLABORATION — The Large Hadron Collider at CERN produces top anti-top quark pairs with a cross section that is more than ten times that of the Tevatron. This provides an unparalleled ability to study the top quark which is the most massive of the known fundamental constituents of matter. The latest ATLAS measurements of the differential top quark pair production cross-sections in the lepton plus jets channel have been made with data collected during the 2011 data taking period using proton-proton collisions at a center-of-mass energy of 7TeV. A discussion of the possible unfolding techniques which correct for detector and resolution affects in the data will be presented in order to motivate the decision to use the Singular Value Decomposition.

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