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## Light Top Squark in Precision Top Quark Sample

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The uncertainty of top pair production cross section measurement at LHC is at a few percent level, which still allows the stop pair production with identical final states  $2b+1+nj+E_T$ . On the other hand, the prompt decay of top quark before hadronization provides opportunity to make its precision measurement possible. In this talk, we apply the ATLAS<sup>2</sup> method of W-polarization measurement in semileptonic top pair events to semileptonic stop pair events and study its prediction. We attempt to use the existing measurement of W-polarization in top quark decay to improve the distinction between stop and top quark states.

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