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Search for single-top quark production in association with a photon in pp collisions with the ATLAS detector at the LHC HARISH POTTI, University of Texas at Austin — Associated production of a single top quark and a photon $(tq\gamma)$ is one of the rare processes predicted in the Standard Model. However, this process has not been observed yet. Cross-section of this process is sensitive to the top quark charge and its electric and magnetic dipole moments. In this talk, I will outline the first-ever ATLAS search for the $tq\gamma$ production performed with 139 fb⁻¹ of pp collision data collected by the ATLAS detector at the LHC at $\sqrt{s} = 13$ TeV. Expected results from this search will be presented.

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