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Upsilon(1S) Production In Proton-Proton Collisions at Center of Mass Energy 7 TeV MAXWELL SCHERZER, Lawrence Berkeley National Laboratory & University of California, Berkeley — A measurement of the cross section for $\Upsilon(1S)$ production in proton-proton collisions at center of mass energy 7 TeV is presented. The measurement covers the rapidity ranges $|y^{\Upsilon}| < 1.2$ and $1.2 < |y^{\Upsilon}| < 2.4$ in the transverse momentum range $p_T^{\Upsilon} < 26$ GeV. The results are based on an integrated luminosity of approximately 1.2pb^{-1}, collected with the ATLAS dectector at the Large Hadron Collider. The signal extraction uses templates derived from data to model the continuum background. Results are compared to predictions from next-to-leading order perturbative QCD calculations.

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