

# Heavy flavour production with the ATLAS experiment

*Tuesday, 1 September 2015 16:30 (25 minutes)*

ATLAS has a wide programme to study the production cross section and decay properties of particles with beauty, as well as charmonium and bottomonium states. This presentation will cover ATLAS results in the domain of charmonium production, including  $J/\psi$ ,  $\psi(2s)$ ,  $\chi_c$  and  $\chi_b$  states as well as the  $X(3872)$  resonance,

using full Run-1 ATLAS dataset and extending upon previous measurements in precision and kinematic reach, but we also present the first quarkonia production results at 13 TeV collisions. In addition we report an updated measurement of the inclusive  $D^*$  meson cross-section. Results of the measurements are compared with the latest theoretical predictions from a variety of theoretical approaches.

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