XX International Workshop on Deep-Inelastic Scattering and Related Subjects



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Quarkonium results from LHCb

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Studies of quarkonia production in the forward region provide important tests of NRQCD. During 2010 and 2011 the LHCb experiment has collected a dataset corresponding to an integrated luminosity of 1 fb-1 in proton-proton collisions at sqrt(s)= 7 TeV. We present studies based on 40 to 1000 fb-1 of data, including the production of the J/psi, psi(2S), Chi_c charmonium together with Upsilon and Chi_b bottomonium states. We also report measurements of double charm production, performed for the first time at a hadron collider. Absolute and relative branching ratios are presented and compared to the most recent theoretical predictions when available. In addition, we will discuss results for the exotic states the X(3872), Y(4140) and Z+(4430), and give prospects for these measurements.

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