Contribution ID: **205** Type: **Parallel Session Talk**

Prompt J/psi and b -> J/psi X production in pp collisions at sqrt(s) = 7 TeV

Thursday 22 July 2010 09:30 (15 minutes)

Despite large experimental and theoretical efforts, the production rate and polarization of quarkonia states in hadronic collisions is not yet satisfactorily understood. With its first ˜10 pb−1 of data, LHCb will be able to provide fresh measurements of the prompt and non-prompt J/ψ production cross sections, at the new center-of-mass energy of 7 TeV and in a unique range of rapidity (3 < y < 5) and transverse momentum (pT < 7GeV/c). The statistical separation between the prompt component and the contribution from b-hadron decays will be achieved using the distance between the pp collision point and J/ψ decay vertex. Preliminary measurements will be compared with predictions, and prospects for the extraction of the prompt J/ψ polarization, and prospects for the measurement of other quarkonia states will be discussed in the light of the first available signals.

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Session Classification: 05 - Heavy Quarks Properties (experiment and theory)

Track Classification: 05 - Heavy Quarks Properties (experiment and theory)