



ID de Contribution: 13

Type: Poster

## Study of charmonium production using decay to hadronic final states with the LHCb experiment

This work is devoted to charmonia prompt and b-decays production study via charmonia decays to  $\phi\phi$  and  $p\bar{p}$  in order to test existing Non-Relativistic QCD predictions.

Using decays to  $\phi$ -meson pairs, the inclusive production of  $\chi_{c0,1,2}$  in b-hadron decays is studied with pp collision data corresponding to an integrated luminosity of  $\int \mathcal{L} dt = 3.0 \text{ fb}^{-1}$ , collected by the LHCb experiment at centre-of-mass energies of 7 and 8 TeV.

Differential  $\eta_c(1S)$  production using its decay to  $p\bar{p}$  in proton-proton collisions at the center of mass energy  $\sqrt{s} = 13 \text{ TeV}$  with an integrated luminosity of  $\int \mathcal{L} dt = 2.0 \text{ fb}^{-1}$  was measured.

**Auteur principal:** M. USACHOV, Andrii (LAL)

**Co-auteur:** Dr BARSUK, Sergey (LAL)

**Orateur:** M. USACHOV, Andrii (LAL)