PHOTON 2019 - International Conference on the Structure and the Interactions of the Photon. Satellite Workshop: Photon Physics and Simulation at Hadron Colliders.

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## Central exclusive production at LHCb

Tuesday, 4 June 2019 15:45 (30 minutes)

The LHCb collaboration has measured central exclusive production of  $J/\psi$ ,  $\psi(2S)$ , and Y mesons as well as  $J/\psi J/\psi$  and  $J/\psi \psi(2S)$  meson pairs in proton-proton collisions. The analyses of Y and charmonium pairs are performed at the centre-of-mass energies of 7 TeV and 8 TeV, and those of  $J/\psi$  and  $\psi(2S)$  are done at 7 TeV and 13 TeV. The analysis at 13 TeV involves the usage of new shower counters. These allow to reduce background by vetoing events with activity in an extended region in rapidity. The measurements of central exclusive production at LHCb are sensitive to gluon distributions for x-Bjorken values down to  $2 \times 10^{4}$ -6 (at 13 TeV). An overview of the LHCb results is presented and compared to existing measurements of other experiments.

## **Summary**

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