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Diffraction at the LHCb Experiment

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The LHCb experiment offers unique capabilities for studying ultra-peripheral collisions (UPCs) and other diffractive processes at the LHC. The forward acceptance of the detector, covering pseudorapidity $2 < \eta < 5$, allows for the detection of low-mass resonances produced in diffraction as well as kinematic reach down to very low x. The particle identification and vertexing capabilities of the detector enable precision measurements of diverse final states within this acceptance, giving access to a wide range of diffractive processes from both protons and heavy nuclei. This talk will provide an overview of recent diffractive results from LHCb, including heavy quarkonium production in UPCs, light hadron spectroscopy, and diffractive production of exotic states.

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