

# Photon-Photon physics at the LHC

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I discuss the possibilities for using the LHC as a photon-photon collider. I demonstrate that the photon parton density in the proton is currently quite well known and consider the implications for the LHC phenomenology. In addition, the colour singlet nature of the photon means that it can readily lead to exclusive or semi-exclusive events, with limited or no extra particle production in the final state. I show how such exclusive processes, in particular in combination with proton tagging measurements, provide an excellent environment in which to test the Standard Model and search for the BSM physics.

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