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## The photon in the MMHT PDFs

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We describe the inclusion of the photon as an additional component of the proton in the MMHT framework. The input for the photon is based very directly on the recent LUX determination. We describe the similarities and differences above the input scale and the contribution from both leading twist and higher twist contributions, and their uncertainties. We study the impact on the other PDFs and the fit quality, for both the proton and neutron PDFs, and the implications for LHC physics.

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