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[Cancelled] Evidence for light-by-light scattering in ultraperipheral PbPb collisions with CMS experiment

Light-by-light (LbyL) scattering ($\gamma\gamma \rightarrow \gamma\gamma$) is a fundamental quantum-mechanical process with tiny cross sections. Studies of LbyL scattering, using the large photon fluxes from ultraperipheral PbPb collisions at $\sqrt{s_N} = 5.02$ TeV at the LHC, will be reported based on the evidence of a signal corresponding to an integrated luminosity of $391 \mu b^{-1}$. The measurement can be recasted into limits on physics beyond the Standard Model, such as Born-Infeld corrections to quantum electrodynamics or GeV mass axions.

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