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Direct calculation of hadronic light-by-light scattering

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Calculations of hadronic light-by-light scattering amplitudes via lattice QCD evaluation of Euclidean four-point functions of vector currents will be reported. These initial results include only the fully quark-connected contribution. Particular attention will be given to the case of forward scattering, which can be related via dispersion relations to the $\gamma\gamma \rightarrow \text{hadrons}$ cross section, and thus allows lattice data to be compared with phenomenology. A strategy for computing the hadronic light-by-light contribution to the muon anomalous magnetic moment will also be briefly outlined.

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