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Light and strange axial form factors of the nucleon at pion mass 317 MeV

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A lattice QCD calculation of the light and strange axial form factors G_A and G_P of the nucleon will be reported. Disconnected diagrams were calculated using hierarchical probing, and a clear nonzero signal was obtained. We pay special attention to renormalization, which we determined nonperturbatively, including the mixing between light and strange quarks. This calculation was done on a single ensemble with 2+1 flavours of stout-smearred Wilson-clover fermions at pion mass 317 MeV and near-physical strange quark mass.

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