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Helicity Dependent Distribution Functions of the proton and Λ and $\Sigma 0$ Baryons

Using continuum Schwinger function methods, a coherent set of predictions for proton, Λ and Σ 0 baryons is delivered - both helicity dependent and unpolarised. The analysis reveals impacts of diquark correlations and SU(3)-flavour symmetry breaking, some of which are significant. For instance, were it not for the presence of axialvector diquarks in the Σ 0, the strange quark could carry none of the Σ 0 spin. The discussion will canvass issues that include helicity retention in hard scattering processes; the sign and size of polarised gluon DFs; and the origin and decomposition of baryon spins.

Primary author: ROBERTS, Craig (Nanjing University)

Presenter: ROBERTS, Craig (Nanjing University)

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