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## Color charge correlations in the proton

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Color charge correlations in the proton at moderately small  $x$  are extracted from its light-cone wave function. The charge fluctuations are far from Gaussian. Correlators are described by  $n$ -body GPDs which exhibit interesting dependence on impact parameter as well as on the relative transverse momentum (or distance) of the gluon probes.

This analysis provides initial conditions for small- $x$  Balitsky-Kovchegov evolution of the dipole scattering amplitude which include impact parameter and  $r^*b$  dependence, and with non-zero  $C$ -odd component due to three-gluon exchange.

The color charge correlators could be measured through various exclusive processes at the EIC. They also determine unintegrated gluon distributions of the proton relevant for  $\gamma - p$ ,  $p - p$ , and  $p - A$  collisions.

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