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## The Three-Dimensional Structure of the Nucleon through Lattice QCD

*Tuesday 4 November 2025 16:40 (20 minutes)*

The HadStruc collaboration is pursuing a program aimed at understanding the three-dimensional internal structure of the nucleon encapsulated in the Generalized Parton Distributions (GPDs) and Generalized Form Factors (GFFs) within the short-distance factorization approach. I present recent work by HadStruc on the isovector GFFs of the nucleon, including those corresponding to non-zero skewness. I then present preliminary results for the reconstructed  $x$ -dependent GPDs. The calculations are performed using 2+1 flavor Wilson-Clover fermions at a pion mass of around 350 MeV, exploiting the distillation framework to provide improved sampling of the gauge configurations, and to provide greater control over the uncertainties arising from the contributions from excited states.

### Parallel Session (for talks only)

Structure of hadrons and nuclei

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**Session Classification:** Structure of hadrons and nuclei