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## Double parton distributions in the nucleon from lattice simulations

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We provide a first study of Mellin moments of double parton distributions (DPDs) in the nucleon on the lattice, where we consider several combinations of quark flavors and polarizations. These are accessible through two-current correlations, which can be obtained by evaluating four-point functions. In this context we consider all possible Wick contractions, where for almost all of them sufficiently clear signals are obtained. In the present study, we employ an  $n_f=2+1$  CLS ensemble on a  $96\times32^3$  lattice with lattice spacing a=0.0856 fm and the pseudoscalar masses  $m_\pi=355$  MeV and  $m_K=441$  MeV.

**Primary author:** ZIMMERMANN, Christian (University of Regensburg)

**Presenter:** ZIMMERMANN, Christian (University of Regensburg)

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