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Pseudo and quasi quark PDFs at small-x

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Pseudo- and quasi-parton distribution functions (PDFs) defined through space-like bilocal operators allow for direct access to the PDFs from first principles in lattice gauge theory. However, this formalism currently leaves the small Bjorken x regime inaccessible. With the future Electron-Ion Collider in mind, it is timely to study the PDFs at small-x. In a previous calculation, we showed that the gluon pseudo and quasi PDFs have distinct behavior at small-x. It is known that the behavior of the quark distribution at small-x is not directly related to that of the gluon PDF, as previous research has shown. In this talk, I will present the calculation of the quark pseudo- and quasi-PDFs in the high-energy limit, and show that they too have distinct behavior at small-x.

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