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## Light-cone PDFs and GPDs from Lattice QCD: an overview of results, successes and challenges

*Tuesday, 13 July 2021 16:35 (20 minutes)*

Lattice QCD (LQCD) is a theoretical non-perturbative approach for the study of QCD dynamics numerically from first principles. LQCD is widely used for hadron structure calculations and is becoming a reliable tool, striving for control of various sources of systematic uncertainties. Parton distribution functions (PDFs) have a central role in understanding hadron structure and have been calculated in lattice QCD mainly via their Mellin moments. In this talk, we will present results for alternative new methods to access PDFs that rely on matrix elements of fast-moving hadrons coupled to non-local operators. The main focus of the talk is to demonstrate the successes and challenges in these approaches using recent results for PDFs and GPDs. Future perspectives will also be discussed.

### Preferred track

Hadron Structure

**Primary author:** Prof. CONSTANTINO, Martha (Temple University)

**Presenter:** Prof. CONSTANTINO, Martha (Temple University)

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