

# 2024 Meeting on Lattice Parton Physics from Large Momentum Effective Theory (LaMET2024)



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## Lanczos for matrix elements

*Tuesday 13 August 2024 13:45 (25 minutes)*

We present a new method for extracting hadronic matrix elements from simultaneous analysis of two- and three-point correlation functions, based on the Lanczos algorithm. In applications to both synthetic and lattice data, we demonstrate its advantages in both signal-to-noise and treatment of excited states over previous analysis approaches. We discuss the potential improvements for quasi-PDF calculations and what will be required to enable them.

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**Session Classification:** Presentations