

# Preliminary Lattice Calculation of the Pion Light-Cone Distribution Amplitude via the Operator Product Expansion

*Friday, August 7, 2020 2:20 PM (20 minutes)*

The moments of the pion light-cone distribution amplitude (LCDA) can be extracted by comparison with the operator product expansion of the pion hadronic tensor with an artificially heavy intermediate quark. We perform a preliminary lattice calculation of this hadronic tensor in the quenched approximation at multiple lattice spacings and use it to extract the continuum limit of the second moment of the pion LCDA. Our results are in agreement with other lattice calculations of the second moment, illustrating the potential of this method.

**Primary author:** GREBE (\*), Anthony (Massachusetts Institute of Technology)

**Co-authors:** HOPE COLLABORATION; DETMOLD, William; KANAMORI, Issaku; LIN, C-J. David; MONDAL, Santanu; PERRY, Robert; ZHAO, Yong

**Presenter:** GREBE (\*), Anthony (Massachusetts Institute of Technology)

**Session Classification:** Hadron Structure

**Track Classification:** Hadron Structure