

## Nucleon energy correlators as a probe for light-quark dipole operators at the EIC

In this talk, we propose nucleon energy correlators (NECs) as a novel framework to probe electroweak light-quark dipole operators in unpolarized deep-inelastic scattering. These operators encode chirality-flipping interactions and typically appear quadratically in unpolarized processes. We construct a chiral-odd quark NEC that accesses quark transverse spin via azimuthal asymmetries in the energy flow of the target fragmentation region. We demonstrate that these asymmetries serve as clean and powerful observables for linearly constraining the quark dipole couplings. Unlike existing methods, our approach avoids the need for polarized nucleon beams or particle identification, relying solely on inclusive calorimetric measurements. This work represents one of the first applications of energy correlator observables to new physics searches and offers a robust path to precision studies of chirality-violating effects at the electron-ion collider.

**Primary authors:** Dr TONG, Xuanbo; Dr HUANG, Yingsheng; 王, 昊琳 (SCNU)

**Presenter:** 王, 昊琳 (SCNU)

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