Nucleon Parton Structure from Continuum QCD\textsuperscript{1} KYLE BEDNAR, Kent State University, IAN CLOET, Argonne National Laboratory, PETER TANDY, Kent State University — The parton structure of the nucleon is investigated using QCD’s Dyson-Schwinger equations (DSEs). This formalism builds in numerous essential features of QCD, for example, the dressing of parton propagators and dynamical formation of non-pointlike di-quark correlations. All needed elements of the approach, including the nucleon wave function solution from a Poincaré covariant Faddeev equation, are encoded in spectral-type representations in the Nakanishi style. This facilitates calculations and the necessary connections between Euclidean and Minkowski metrics. As a first step results for the nucleon quark distribution functions will be presented. The extension to the transverse momentum-dependent parton distributions (TMDs) also be discussed.

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