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Confronting lattice parton densities within global QCD analysis JACOB BRINGEWATT, University of Maryland, College Park, M. CONSTANTINOU, Temple University, W. MELNITCHOUK, J. QIU, N. SATO, Jefferson Lab, F. STEFFENS, Bonn University, JEFFERSON LAB ANGULAR MOMENTUM (JAM) COLLABORATION — Recent progress in lattice QCD simulations of parton quasi-distributions is paving the way towards the study of the momentum dependence of PDFs from first principles. We present the first combined global QCD analysis of inclusive deep-inelastic scattering, Drell-Yan and other high-energy scattering data with recent results from lattice calculation of the $u-d$ PDF in the proton. We examine how the lattice results match with phenomenological determinations of PDF parameters, and determine which regions of parton fraction in the lattice data induce constraints on the $\bar{d} - \bar{u}$ PDF asymmetry in the proton.

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