

Abstract Submitted
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A bottom-up strategy to extract generalized parton distributions from experiment¹ SIMONETTA LIUTI, University of Virginia — We will present a bottom-up strategy to extract generalized parton distributions in the non-singlet sector from Deeply Virtual Compton Scattering data [1,2]. Our approach makes use of all available experimental information on both the proton and neutron form factors, and on the (inclusive) deep inelastic structure functions within a flexible parameterization based on a Regge-improved diquark model. Additional constraints provided by lattice calculations of the $n=2,3$ moments of generalized parton distributions are implemented through a reconstruction method based on orthogonal polynomials. Q^2 evolution, polynomiality, as well as a new set of constraints provided by dispersion relations [3] are also discussed. [1] S. Ahmad, H. Honkanen, S. Liuti and S. K. Taneja, arXiv:0708.0268 [hep-ph]. [2] S. Ahmad, H. Honkanen, S. Liuti and S. K. Taneja, Phys. Rev. D **75**, 094003 (2007) [3] M. Diehl and D. Y. Ivanov, Eur. Phys. J. C **52**, 919 (2007)

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