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Title:	Generalized parton distributions in the soft-wall model of AdS/QCD
Authors:	Sharma, Neetika (/jspui/browse?type=author&value=Sharma%2C+Neetika)
Keywords:	Model of AdS/QCD Electromagnetic Nucleons
Issue Date:	2014
Publisher:	American Physical Society
Citation:	Physical Review D - Particles, Fields, Gravitation and Cosmology, 90(9)
Abstract:	We present a numerical analysis of helicity independent nucleon generalized parton distributions (GPDs) using the known formalism based on inclusion of higher Fock states in the soft-wall approach of the anti-de Sitter/QCD model. We calculate the momentum space GPDs by matching the electromagnetic form factors in the AdS model to the sum rules in QCD. We investigate their Mellin moments, transverse impact parameter GPDs, transverse mean square radius, and transverse width. We further extend this work to investigate the charge and anomalous magnetization densities for both unpolarized and transversely polarized nucleons. A comparison of results on density functions with phenomenological parametrization is also presented.
URI:	<a href="https://journals.aps.org/prd/abstract/10.1103/PhysRevD.90.095024">https://journals.aps.org/prd/abstract/10.1103/PhysRevD.90.095024</a> ( <a href="https://journals.aps.org/prd/abstract/10.1103/PhysRevD.90.095024">https://journals.aps.org/prd/abstract/10.1103/PhysRevD.90.095024</a> ) <a href="http://hdl.handle.net/123456789/2760">http://hdl.handle.net/123456789/2760</a> ( <a href="http://hdl.handle.net/123456789/2760">http://hdl.handle.net/123456789/2760</a> )
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