

Abstract
References

Nuclear Physics B

Volume 312, Issue 3, 23 January 1989, Pages 571-588

Novel effects in deep inelastic scattering from spin-one hadrons [☆]Pervez Hoodbhoy¹, R.L. Jaffe, Aneesh Manohar²

Center for Theoretical Physics, Laboratory for Nuclear Science and Department of Physics, Massachusetts Institute of Technology, Cambridge, MA 02319, USA

Choose an option to locate/access this article:

Check if you have access through your login credentials or your institution

Check access

Purchase

Get Full Text Elsewhere

Abstract

Deep inelastic scattering from a polarized spin-one target yields qualitatively new information which is not available in the spin-half case. Among several new structure functions, one, $b_1(x)$, is leading twist in QCD. It can be measured with an unpolarized beam. $b_1(x)$ is small and calculable for a weakly bound collection of nucleons, and therefore its measurement would provide a clear signature for exotic components in a spin-one nucleus.

There are no figures or tables for this document.

[☆] This work was supported in part by the Department of Energy (DOE) under contract number DE-AC02-76ER03069.

2 Permanent Address: Department of Physics, Quaid-e-Azam University, Islamabad, Pakistan. Also supported in part by NSF grant number 8811939-INT and PSF grant number C-QU/PHY(57).

3 Supported in part by a grant from the Alfred P. Sloan Foundation.

Copyright © 1989 Published by Elsevier B.V.

About ScienceDirect

Information for advertisers

About Elsevier

Terms and conditions

Contact and support

Privacy policy

ELSEVIER

Copyright © 2013 Elsevier B.V. except certain content provided by third parties. ScienceDirect® is a registered trademark of Elsevier B.V.

Cookies are used by this site. To decline or learn more, visit our [Cookies page](#)[http://dx.doi.org/10.1016/0550-3213\(89\)90572-6](http://dx.doi.org/10.1016/0550-3213(89)90572-6)[Get rights and content](#)

Bibliographic information

Citing and recommended articles

Recommended articles

Deep inelastic scattering from arbitrary spin targets

1989, Nuclear Physics B

[Show more information](#)**High-momentum-transfer processes with polarized deuterons**

1983, Nuclear Physics A

[Show more information](#)**Infrared safety in factorized hard scattering cross-sections**

2009, Physics Letters B

[Show more information](#)[View more articles »](#)

Cited by (63)

A study of He-3 in a phenomenological approach

2013, Nuclear Physics A

[Show more information](#)**Generalized parton distribution functions of a deuteron in a phenomenological Lagrangian approach**

2013, Journal of Physics G: Nuclear and Particle Physics

Applications and tools

Workspace

ADVERTISEMENT

Do you
organise
scientific
or medical
events?GLOBALEVENTSLIST
ELSEVIER's resource of the world's
scientific & medical events