

Tensor-polarized parton distribution functions for spin-1 hadrons

Structure functions of the spin-1 deuteron will be investigated experimentally from the late 2020's at various facilities such as Thomas Jefferson National Accelerator Facility, Fermi National Accelerator Laboratory, nuclotron-based ion collider facility (NICA), and electron-ion colliders. We expect that a new high-energy spin-physics field could be created by these projects. In this paper [1], the current theoretical status is explained for the structure functions of spin-1 hadrons, especially on parton distribution functions, transverse-momentum dependent parton distributions, and fragmentation functions.

Reference

[1] S. Kumano, Euro. Phys. J. A 60 (2024) 205.

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