

Vector Polarization of the Nuclotron Deuteron Beam at the Energies from 200 to 650 MeV/nucleon

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The deuteron beam vector polarization was obtained at the Nuclotron Internal Target Station using the proton-proton quasielastic scattering on the polyethylene target at the beam energies of 200, 500, 550, and 650 MeV/nucleon. The selection of useful events was performed using the time and amplitude information from scintillation counters. The asymmetry on hydrogen was obtained by the subtraction of the carbon background. The obtained values are compared with the data obtained using the deuteron-proton elastic scattering at the beam energy of 135 MeV/nucleon.

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