

## Effective nucleon polarization in polarized targets.

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The nucleon spin structure functions have been extracted from measurements of asymmetries in deep inelastic scattering of polarized leptons on polarized nuclei in several experiments at CERN, SLAC and DESY. The polarized nuclei present in practical targets: H,  $^2\text{H}$ ,  $^3\text{He}$ ,  $^{14}\text{N}$ ,  $^{15}\text{N}$ ,  $^6\text{Li}$  and  $^7\text{Li}$ , are, with the exception of hydrogen, systems of bound nucleons, some of which can attain significant degrees of alignment. All the aligned nucleons contribute to the asymmetries. The contributions of each nuclear species to the asymmetry have to be carefully determined, before a reliable value for the net nucleon asymmetry is obtained. For this purpose, the spin component of the nuclear angular momentum for every nuclear state and the probability of each state have to be known with sufficient accuracy. In this talk I discuss the basic corrections used to estimate the contributions of the different nuclei, with emphasis on the  $A = 6$  and  $7$  Li isotopes present in the  $\text{Li}^2\text{H}$  polarized target used during SLAC Experiment 155 to study the deuteron spin structure.