

## Measurements of the beam and target analyzing powers and spin correlation parameter $A_{nn}$ in elastic pp scattering at 45 GeV/c.

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We proposed the experiment for measuring the spin observables,  $A_b$ ,  $A_t$  and  $A_{nn}$  in elastic pp scattering by using the both normally polarized proton beam and target at momentum  $p = 45$  GeV/c. Such study will allow us to test experimentally the equality of polarization  $P$  to analysing powers  $A_N$ . This equality was theoretically proved and widely used for extraction the polarization observables with unpolarized beam and polarized target. The polarization and analysing power at high energy are rapidly decreasing. Therefore, the recoil proton polarization was measured by using the double scattering schema. For determination  $P$ ,  $A_n$  and  $A_{nn}$  one needs to use the polarized beam and polarized target in the one scattering schema. But such experiments are very scarce. There are no the experimental data on the spin correlation parameter  $A_{nn}$  in diffractive region at the momentum more than 12 GeV/c.

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