

POLARIZED BEAMS POLARIMETERS AT ENERGY RANGE 0,07 – 1 GeV

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It is considered and analyzed the possibilities to design the various ions polarimetry at wide energy range. The problem is connected with the depolarization resonance at acceleration in the cyclic ion storage rings (ISR) including project of the ISR at the INR, and depolarization phenomena in the accelerated ions transportation lines. The main requirements are formulated: universality at wide energy range and various ions masses, maximal effectivity, the most useful suitable analyzing nuclei and reactions, contemporary data on analyzing powers. From the kinematical calculation angle ranges of the secondary particles are defined and the methods of background counts suppression are proposed. The scheme of polarimeter capable to work as at ISR ion acceleration so at polarized circulating in ISR beams needed for experiment energy is described. The scheme includes the target unit, a polarimeter chamber and detector system.