



Contribution ID : 296

Type : Oral talk

Polarization measurement of Λ - and $\bar{\Lambda}$ -hyperons formed by the interaction of K^- - and π^- -mesons with nuclei at the SPASCHARM facility at the U-70 accelerator

Wednesday, 23 October 2024 18:35 (15)

The first results on the polarization of inclusively produced Λ -hyperons in the K^- - and π^- -beams and $\bar{\Lambda}$ -hyperons in the π^- -beam with a momentum of 26.5 GeV/c were obtained at the SPASCHARM facility at the U-70 accelerator complex in Protvino. For the data on the K^- -meson beam, a noticeable positive polarization is observed in the region of large values of the Feynman variable x_F and the transverse momentum p_T , which was measured for the first time on nuclei. The polarization of Λ - and $\bar{\Lambda}$ -hyperons in the π^- -beam does not exceed several percent in most of the studied kinematic region, with the exception of the region $p_T > 1$ GeV/c, where the Λ polarization is 23 ± 9 %.

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Session Classification : HEP Experiment

Track Classification : High energy physics: experiment