## DIS 2014 - XXII. International Workshop on Deep-Inelastic Scattering and Related Subjects



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## HERMES results on transverse target single-spin asymmetries in inclusive electroproduction of charged pions and kaons

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Single-spin asymmetries were investigated in inclusive electroproduction of charged pions and kaons from transversely polarized protons at the HERMES experiment. The asymmetries were studied as a function of the azimuthal angle  $\psi$  about the beam direction between the

target-spin direction and the hadron production plane, the transverse hadron momentum  $p_T$  relative to the direction of the incident beam, and the Feynman variable  $x_F$ .

The  $\sin \psi$  amplitudes are positive for  $\pi^+$  and  $K^+$ , slightly negative for  $\pi^-$  and consistent with zero for  $K^-$ , with particular  $p_T$  but weak  $x_F$  dependences. Especially large asymmetries are observed for two small subsamples of events, where also the scattered electron was recorded by the spectrometer.

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