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Hadron single spin asymmetry and polarization relation in reactions involving photons

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A phenomenological model which has had some sucess in explaining polarization phenomena and left-right asymmetry in inclusive proton-protons reactions involving photons. In particular, the reactions (a) gamma+p \rightarrow H+X;(b) gamma+p(->) -> pi+X and (c)p(->)+p-> gamma + X are considered where gamma=resolved photon and hyperon H=Lambda, Sigma, etc. Predictions for hyperon polarization in (a)and the asymmetry (in(b)and(c)) provide further tests of this particular model. Feasibility of observing (b) at HERA and the effect of the polarization of the sea in the proton in p(->)+p -> pi+X is briefly discussed.

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