RESONANCES AND Λ^0 POLARIZATION IN 800 GeV/c $pp \rightarrow p_{diffracted}\Lambda^0 K^+$

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Λ^0 polarization from $pp \rightarrow p_{diffracted}\Lambda^0 K^+$ at 800 GeV/c in the average depends linearly on $\Lambda^0 K^+$ invariant mass: Λ^0 polarization is 0.635 ± 0.036 at 1.64 GeV, consistent with zero at ~ 2.195, and -0.586 ± 0.072 at 3.20 GeV. The origin of this Λ^0 polarization is, probably, the interference of at least two $\Lambda^0 K^+$ resonances, created from the excitation of the target proton, due to the diffracted proton transferred momentum.

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