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Transverse polarization of Λ hyperons within a jet in unpolarized hadronic collisions

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After recalling the latest extractions of the Λ polarizing fragmentation functions within a TMD approach from fits to e^+e^- data, I will present theoretical estimates for the spontaneous transverse polarization of Λ hyperons produced in unpolarized pp collisions inside a jet. For the latter, transverse momentum effects are included only in the fragmentation mechanism. These predictions will be then compared against preliminary STAR results.

Special attention will be paid to the universality properties of the quark polarizing fragmentation function and, for the first time, to the role and size of its gluon counterpart.

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