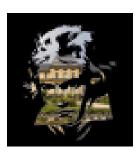
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Constraining quark angular momentum with the Sivers function

Wednesday 28 March 2012 16:30 (20 minutes)

The determination of quark angular momentum requires the knowledge of the generalized parton distribution E in the forward limit. We assume a connection between this function and the Sivers transverse-momentum distribution, based on model calculations and theoretical considerations. Using this assumption, we show that it is possible to fit at the same time nucleon magnetic moments and semi-inclusive single-spin asymmetries. This imposes additional constraints on the Sivers function and opens a plausible way to quantifying quark angular momentum.

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