

# Photoproduction of hadron pairs with high transverse momenta at fixed target experiments

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We consider the photoproduction of two hadrons in polarized lepton-nucleon collisions in the framework of perturbative QCD. After illustrating how to obtain the experimentally relevant observables a detailed phenomenological study of the photoproduction of hadron pairs at high transverse momenta is presented. We show theoretical predictions for the relevant cross sections and double-spin asymmetries at HERMES and COMPASS kinematics as well as theoretical uncertainties and analyze the sensitivity of the asymmetries to the gluon polarization  $\Delta g$  in the nucleon.

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