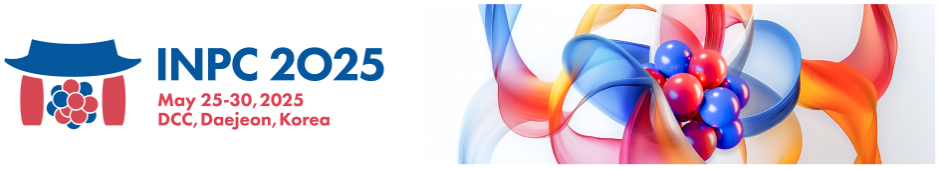

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Hard exclusive reactions with baryon number transfer: status and perspectives

Friday, 30 May 2025 11:40 (15 minutes)

Nucleon-to-meson Transition Distribution Amplitudes (TDAs) appear as building blocks in the collinear factorized description of amplitudes for a class of hard exclusive reactions prominent examples being hard exclusive pion electroproduction off a nucleon in the backward region and baryon-antibaryon annihilation into pion and a lepton pair.

We discuss general properties of nucleon-to-meson TDAs and argue that
these non-perturbative objects turn to be a convenient complementary tool to explore the structure of hadrons at the partonic level. We present an overview of hard exclusive reactions admitting a description in terms of TDAs. We discuss the first signals from hard exclusive backward meson electroproduction at JLab and explore further experimental opportunities to access TDAs atJLab, PANDA, J-PARC and EIC.

Primary authors: SEMENOV-TYAN-SHANSKIY, Kirill (Kyungpook National University, Daegu, Korea); SZNAJDER, Pawel

Co-authors: PIRE, Bernard; SZYMANOWSKI, Lech

Presenter: SEMENOV-TYAN-SHANSKIY, Kirill (Kyungpook National University, Daegu, Korea)

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