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Combining nonperturbative models with the CSS formalism

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Phenomenological analyses of hadron structure from semi-inclusive observables require the use of models to characterize nonperturbative effects, embedded into a formalism of TMD evolution. Constraints provided by pQCD calculations must be imposed in order to maximize predictive power. This is particularly important when attempting to use phenomenological extractions over wide scale ranges. In this talk, we will discuss how such constraints are not necessarily guaranteed when using arbitrary parametric forms. By considering the special role of observables at low to moderate scales, we will provide a practical recipe for incorporating nonperturvative models into the CSS formalism. Special attention will also be payed to the role of TMD integral relations in building models optimally embedded into the CSS formula.

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