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Double gluon distribution from the single gluon distribution

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Multi parton distribution functions (MPDs) are interesting in view of the study of Multi Parton Interactions in hadron-hadron collisions.
We use the Stirgling-Gaunt sum rules to construct explicitly an initial condition for the double gluon distribution function starting from the known MSTW form of the single gluon distribution function. The result is parameter free. We also consider the evolution of the distribution function with a hard scale numerically and discuss the perspective for the extension of the results to the quark sector.

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