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Type: **Talk**

## One-loop corrections to dihadron production in DIS at small $x$

*Thursday 4 August 2022 10:05 (25 minutes)*

We calculate the one-loop corrections to dihadron production in DIS at small  $x$  using the Color Glass Condensate effective theory of QCD to describe the target dynamics. We show that UV and soft divergences cancel while collinear divergences are absorbed into hadron fragmentation functions. The rapidity divergences lead to JIMWLK evolution of dipoles and quadrupoles in terms of which the production cross section is given. We discuss the phenomenological implications of our results for dihadron angular correlations in EIC.

### Preferred track

Forward & Diffractive Physics

### Subfield

Heavy-ion theory

### Attending in-person?

Yes

### On behalf of collaboration?

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**Session Classification:** Forward & diffractive physics 2

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