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## Multijet and $Z_j$ azimuthal correlations - factorization breaking

*Friday 4 November 2022 15:30 (15 minutes)*

In this talk recent studies on  $Z_j$  and dijet azimuthal correlations in the TMD parton branching method at NLO will be presented. The region where the azimuthal angle  $\Delta\phi_{jj}(Z_j) \approx \pi$  is sensitive to soft-gluon resummation and TMD effects. In this back-to-back region, factorization-breaking effects may arise for such colored final states. Therefore we propose a measurement of both  $Z_j$  and  $jj$  correlations for high- $p_T$  in the same kinematic region in order to find hints of possible factorization-breaking effects by comparing the measurement to predictions in which factorization holds.

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