

Threshold resummation for the LHC: all order colour structure and application to squark production

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We present a factorization formula for the production of pairs of heavy coloured particles in hadronic collision at the production threshold. We construct a basis in colour space that diagonalizes the soft function appearing in the factorization formula to all orders in perturbation theory. We perform a resummation of soft gluon effects in momentum space and present results for the example of squark-antisquark production at the LHC.

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