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## Curing high-energy instability of quarkonium production cross sections with High-Energy Factorization

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The problem of negative NLO cross sections of heavy quarkonium production at high collision energies is considered [1]. It arises due to unphysical behaviour of the high partonic energy asymptotics of NLO partonic coefficient function in collinear factorisation, which can be cured via matching of the NLO calculation with Leading-Logarithmic resummation of partonic center-of-mass energy logarithms. The latter resummation is done using the formalism of High Energy Factorisation.

[1] J.P. Lansberg, M. Nefedov and M.A. Ozelik, Matching next-to-leading-order and high-energy-resummed calculations of heavy-quarkonium-hadroproduction cross sections JHEP 05, 083 (2022) doi:10.1007/JHEP05(2022)083 [arXiv:2112.06789 [hep-ph]].

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