## 6th ComHEP: Colombian Meeting on High Energy Physics



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## Long-distance matrix elements in charmonium production fitted with LHCb data

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The charmonium decay and production can be modeled using nonrelativistic QCD factorization. This factorization consists of some long-distance matrix elements and a set of constants that must be fixed by the short-distance dynamics. The current work is focused on reviewing the short distance constants' computation for the B decays into charmonium at NLO using covariant projectors, and their application on the factorization formulae to perform a fitting with the LHCb data.

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