

VBFNLO 3.0 Release (24+6)

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We present the latest release of VBFNLO, a parton-level Monte Carlo generator. This update introduces several key enhancements: parallel processing capabilities through MPI, additional physics processes, unitarization procedures for Effective Field Theories (EFTs), three new dimension-8 operators, and implementation of the Binoth Les Houches Accord (BLHA) interface for integration with event generators such as Herwig.

VBFNLO continues to serve as a valuable tool for LHC experimental collaborations, offering both verification capabilities for modern automatic Monte Carlo generators and superior computational efficiency in many processes.

In the context of Higgs physics, we demonstrate new results for Vector Boson Scattering (VBS) processes Hjj and Hjjj at NLO QCD accuracy matched to parton showers, and analyze their comparison with fixed-order calculations.

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