Particle Physics on the Plains 2022 Part 2



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NLO Multijet Merging for Higgs Production Beyond the VBF Approximation, Part I

Saturday 22 October 2022 11:40 (25 minutes)

In this talk I will present results of the situation of electroweak Higgs boson production using both the NLO multijet merging and NLO matching frameworks provided by the general purpose event generator Herwig 7. For the simulation of the hard scattering processes, we use the HJets library for the full calculation and VBFNLO for the approximate calculation to compute the $2 \rightarrow 2 + n$ amplitudes at tree-level with n=2,3,4 and at one-loop with n=2,3.

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