

Automation of NLO QCD and EW corrections with Sherpa and Recola

Tuesday, 29 August 2017 17:00 (30 minutes)

In this talk, the combination of the one-loop matrix-element generator Recola with the multipurpose Monte Carlo program Sherpa is presented. Since both programs are highly automated, the resulting Sherpa+Recola framework allows for the computation of—in principle—any Standard Model process at both NLO QCD and EW accuracy. The reliability of the Sherpa+Recola framework will be demonstrated via the NLO QCD and electroweak computation of off-shell Z-boson pair production and the production of a top-quark pair in association with a Higgs boson. As the implementation is fully automatised, this makes it a perfect tool for both experimentalists and theorists who want to use state-of-the-art predictions at NLO accuracy in their analyses.

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