

PAUL SCHERRER INSTITUT



Particle Theory Seminar

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“Automation of NLO computations using the FKS subtraction method”

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Abstract:

The universal FKS subtraction formalism has recently been implemented in the MadFKS code, which allows for the automation of any cross section at the next-to-leading order (NLO) in QCD. The only ingredient to be provided externally by the user is the finite part of the virtual corrections. In this talk—after a long introduction about the need of NLO computations, including a fairly recent example in single top production—the FKS formalism will be shortly reviewed, and its implementation discussed extensively. The performances of the MadFKS code will be shown and some results for NLO event shapes and rates in e^+e^- to jets (including the virtual corrections) will be given.