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Machine Learning Efforts in SHERPA

Tuesday, 30 November 2021 18:20 (20 minutes)

Modern machine learning methods offer great potential for increasing the efficiency of Monte Carlo event generators. We present the latest developments in the context of the event generation framework SHERPA. These include phase space sampling using normalizing flows and a new unweighting procedure based on neural network surrogates for the full matrix elements. We discuss corresponding general construction criteria and show examples of efficiency gains for relevant LHC production processes.

Significance

References

Speaker time zone

Compatible with Europe

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