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# Exploring evaluation methods for generative models in HEP

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Deep generative models have emerged as a powerful paradigm for enhancing and maximising the potential for discovery at collider experiments. They can be deployed for multiple tasks, including fast simulations, data augmentation and anomaly detection. As novel methods continue to be developed, there is a pressing need to advance techniques for model selection and evaluation, particularly in high-dimensional scenarios. Such studies are crucial in a precision-driven field like high-energy physics. In this presentation, I will discuss some recent work in this direction, focusing on normalising flows, a popular class of methods for density estimation that allows both sampling and evaluation by construction.

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