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Stochastic normalizing flows for lattice field theory

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Normalizing flows (NFs) are a class of machine-learning algorithms that can be used to efficiently evaluate posterior approximations of statistical distributions. NFs work by constructing invertible and differentiable transformations that map sufficiently simple distributions to the target distribution, and provide a new, promising route to study quantum field theories regularized on a lattice. In this contribution, based on our recent work [[arXiv:2201.08862](https://arxiv.org/abs/2201.08862)], I explain how to combine NFs with stochastic updates, demonstrating that this theoretical framework is the same that underlies Monte Carlo simulations based on Jarzynski's equality, and present examples of applications for the evaluation of free energies in lattice field theory.

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