Numerical Challenges in Lattice QCD 2022









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Gradient estimators for normalising flows

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ecently a machine learning approach to Monte-Carlo simulations called Neural Markov Chain Monte-Carlo (NMCMC) is gaining traction. In its most popular form it uses neural networks to construct normalizing flows which are then trained to approximate the desired target distribution. The training is done using some form of gradient descent so gradient estimation is necessery. In my talk I will review several gradient estimators that can be used for this purpose and discuss their pros and cons in terms of required computational time and quality of the training.

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