

Lattice 2024



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Machine-learning approaches to accelerating lattice simulations

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The last decade has seen an explosive growth of interest in exploiting developments in machine learning to accelerate lattice QCD calculations. On the sampling side, generative models are a promising approach to mitigating critical slowing down and topological freezing. Meanwhile, signal-to-noise problems have been shown to be improvable by the use of optimized improved observables. Both techniques can be made free of bias, resulting in trustworthy but reduced statistical errors. This talk reviews recent developments in this field.

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