

# Tensor renormalization group in field theory

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Recently, a novel approach using tensor renormalization group (TRG) has made great progress in the numerical computation of lattice field theory. In the TRG, partition functions and correlation functions are represented as tensor networks. Their values can be evaluated by coarse-graining the network without using probabilities like Monte Carlo methods. Therefore, the TRG can easily be applied to systems with sign problems. In this talk, I review the TRG method and talk about how it is used in computations of lattice field theory.

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