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## Initial tensor construction and dependence for tensor renormalization group

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We propose a method for the construction of the initial tensor representation and its dependence on the tensor renormalization group (TRG). The TRG method is a numerical calculation technique that utilizes tensor network representations of physical quantities to investigate physical properties without encountering the sign problem.

To apply the TRG method, it is essential to make a typical (locally connected) tensor network suitable for recursive coarse-graining. In this talk, we present a systematic approach for translating a general tensor network into this typical tensor network. Additionally, we discuss the dependence on the details of the initial tensor network.

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