

Abstract Submitted
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Second Renormalization of Tensor-Network States TAO XIANG,
Institute of Physics, Chinese Academy of Sciences — We propose a second renormalization group method to handle the tensor-network states or models. This method dramatically reduces the truncation error of the tensor renormalization group. It allows physical quantities of classical tensor-network models or tensor-network ground states of quantum systems to be accurately and efficiently determined. References: [1] H.C. Jiang, Z.Y. Weng, T. Xiang, Phys. Rev. Lett. 101, 090603 (2008). [2] Z. Y. Xie, H. C. Jiang, Q. N. Chen, Z. Y. Weng, T. Xiang, Phys. Rev. Lett. 103, 160601 (2009).

Tao Xiang
Institute of Physics, Chinese Academy of Sciences

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