Full counting statistics and the Edgeworth series for matrix product states YIFEI SHI, University of Virginia — We consider full counting statistics of spin in matrix product states. In particular, we study the approach to gaussian distribution for magnetization. We derive the asymptotic corrections to the central limit theorem for magnetization distribution for finite but large blocks in analogy to the Edgeworth series. We also show how central limit theorem like behavior is modified for certain states with topological characteristics such as the AKLT state.

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