

Erratum: Marshall's sign rule and density-matrix renormalization-group acceleration
[Phys. Rev. B 58, 8194 (1998)]

Ulrich Schollwöck

[S0163-1829(99)03005-2]

The application of the so-called fundamental rule was not properly presented in my paper; the presented results do not change, as they were produced using the correct way of application. The fundamental rule should not be applied to all block states, but *only* to that state $|m_{L+1}\rangle$ in each density (sub-)matrix of constant magnetization that has the highest weight in that density (sub-)matrix. If the application of the fundamental rule leads to a global sign flip, this sign flip is carried out for *all* eigenvectors in that density (sub-)matrix. This approach is necessary because less important states obey Marshall's sign rule not as well, as it holds only approximatively. I also want to stress that this works only if the global sign of each eigenvector of the density matrix before application of the fundamental rule was chosen such that its biggest component is positive. Some diagonalization procedures do this automatically; otherwise this is trivially enforceable.