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Erratum: Irreversible models with Boltzmann–Gibbs probability distribution and entropy production

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We claimed in this paper (2011 *J. Stat. Mech.* P12012) that in the cubic lattice there are irreversible spin-flip dynamics with stationary probability distribution of the Boltzmann–Gibbs (BG) type. This conclusion was based on the incorrect assumption that there are nontrivial solutions of equations (80)–(83) when $a_3 = a_4 = a_5 = a_6 = 0$. These equations do not in fact have nontrivial solutions. They have just one solution, and this unique solution leads to a reversible dynamics. Therefore, within the assumed form (20) for the transition rates the correct conclusion is that there are no irreversible dynamics in the cubic lattice, in agreement with the general statement by Godrèche and Bray [1] that there are no irreversible spin-flip dynamics in the cubic lattice with nontrivial BG probability distribution.

References

[1] Godrèche C and Bray A J, 2009 *J. Stat. Mech.* P12016