

# Errata: Statistical Entropy of a Lattice-Gas Model: Multiparticle Correlation Expansion<sup>1</sup>

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1. The original version of the manuscript was *received* by the Editor on December 23, 1997 (**not** in 1998, as incorrectly printed).

2. The e-mail address (prestip@vulcano.unime.it) that is printed at the end of Footnote 1 refers to S. Prestipino only.

3. The current e-mail address of the corresponding author (Paolo V. Giaquinta), that is given on the first page in Footnote 2, should read: Paolo.Giaquinta@unime.it.

4. Equation (2.13): The comma just before the first inequality sign, that is enclosed within parentheses in the lower limit of the sum, is spurious and should be removed. Equation (2.13) should then read as follows:

$$\langle c_{i_1} \cdots c_{i_M} \rangle^{(n)} = \frac{1}{(n-M)!} \sum_{\substack{i'_1, \dots, i'_{n-M}=1 \\ (i'_p \neq i'_q, i'_p \neq i_r)}}^N \frac{e^{-\beta U_n(i^m, i^{n-M})}}{Z_n} \quad (2.13)$$

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5. Equation (2.16): Dots are missing in the lower limit of the second sum. Equation (2.16) should then read as follows:

$$P_0 + \sum_{n=1}^N \sum_{i_1 < \dots < i_n} P_n(i^n) = 1 \quad (2.16)$$

6. Equation (3.7): There is a misprint in the argument of the exponential. The index labelling the  $U$  function should be  $M+S$ . Equation (3.7) should then read as follows:

$$\Gamma^{(R)} F_M(i^M) = \sum_{S=R}^{N-M} \frac{z^S}{(S-R)!} \sum_{\substack{i'_1, \dots, i'_S=1 \\ (i'_p \neq i'_q, i'_p \neq i_r)}} e^{-\beta U_{M+S}(i^M, i'^S)} \quad (3.7)$$

7. Equation (3.28): (i) The upper limit,  $N$ , of the sum is missing; (ii) furthermore, a prime is missing in the second argument of the function  $G_{M+k}$ . Equation (3.28) should then read as follows:

$$\frac{z^k}{F_M} \frac{\partial^k F_M}{\partial z^k} = \rho^k \sum_{\substack{i'_1, \dots, i'_k=1 \\ (i'_p \neq i'_q, i'_p \neq i_r)}}^N \frac{G_{M+k}(i^M, i'^k)}{G_M(i^M)} \quad (3.28)$$

8. Equation (3.31) [fourth line]: The exponent  $n_k$  of the last quantity in parentheses is missing. The fourth line of Equation (3.31) should then read as follows:

$$\times \sum_{n_1, \dots, n_R} \left( \sum_{k=1}^R n_k - 1 \right)! \prod_{k=1}^R \frac{1}{n_k!} \left( \frac{-1}{k!} \sum_{\substack{i'_1, \dots, i'_k=1 \\ (i'_p \neq i'_q, i'_p \neq i_r)}}^N \frac{G_{n+k}(i^n, i'^k)}{G_n(i^n)} \right)^{n_k} \quad (3.31)$$

9. Equation (3.38) [fourth line]: A “hyphen” was printed in between the first two terms (just before the second “3”) instead of a “minus” sign. The fourth line of Equation (3.38) should then read as follows:

$$+ 3g_2(i_1, i_2) g_2(i_1, i_3) - 3g_2(i_1, i_2) + 1] + \mathcal{O}(\rho^4) \quad (3.38)$$

10. Equation (4.12): The matrix  $\mathcal{F}$  was printed as a column vector. Equation (4.12) should read as follows:

$$\mathcal{F} = \begin{pmatrix} e^{K+H} & e^{-K} \\ e^{-K} & e^{K-H} \end{pmatrix} \quad (4.12)$$

11. The symbol  $T$ , appearing three times in the two lines of text following Equation (4.13), should have been printed, instead, as  $\mathcal{T}$ .

12. Equation (5.20): A misalignment occurred in the three lines of text on the extreme right-hand side of this equation. Equation (5.20) should read as follows:

$$\sum_{n=1}^{k-1} (-1)^n \binom{k-1}{n-1} (k-n)^d = \begin{cases} -(-1)^k, & \text{for } d=0 \\ 0, & \text{for } d=1, 2, \dots, k-2 \\ -(k-1)!, & \text{for } d=k-1 \end{cases} \quad (5.20)$$