

## Corrections to finite-size scaling for quantum chains

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1985 J. Phys. A: Math. Gen. 18 187

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## Corrigenda

### Corrections to finite-size scaling for quantum chains

G V Gehlen, C Hoeger and V Rittenberg 1984 *J. Phys. A: Math. Gen.* **17** L469-72

A factor of 2 should be inserted into equation (6) which correctly reads:

$$NE_N^{(B)}(\lambda = 1) = -NE_N^{(A)}(\lambda = 1) + 2N\Lambda(\frac{1}{2}). \quad (6)$$

The same factor is missing in the computation of the energy gap for the free boundary condition, so correctly the abscissa in figure 1 should be denoted as  $(\pi\gamma)^{-1}NE_N(\lambda = 1)$ . Hence the scaled energy gap does depend on the boundary conditions and instead of equation (9) we get for  $N \rightarrow \infty$  in leading order of  $N$ :

$$NE_N^{(A)}(\lambda = 1) = \frac{1}{2}\pi\gamma$$

$$NE_N^{(B)}(\lambda = 1) = \frac{3}{2}\pi\gamma$$

$$NE_N^{(C)}(\lambda = 1) = \pi\gamma.$$

This error does not affect our computation on the three-state Potts model. We thank Dr T Burkhardt for pointing out the above mentioned mistakes.

### Quantum fluid dynamics within a relativistic density-functional framework

S K Ghosh and B M Deb 1984 *J. Phys. A: Math. Gen.* **17** 2463-73

Equation (61) on page 2471 should read

$$\begin{aligned} (\Theta_{\mu\nu})_j &= (\Theta_{\nu\mu})_j = \frac{1}{2}[(T_{\mu\nu})_j + (T_{\nu\mu})_j] \\ &= (T_{\mu\nu})_j - \frac{1}{4i}(\hbar/mc)\epsilon_{\mu\nu\kappa\lambda}\partial_\kappa(J'_\lambda)_j. \end{aligned} \quad (61)$$