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Quantum fluid dynamics within a relativistic density-functional framework

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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:

$$NE_N^{(B)}(\lambda = 1) = -NE_N^{(A)}(\lambda = 1) + 2N\Lambda(\frac{1}{2}).$$
 (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 $(\pi \gamma)^{-1} N E_N(\lambda = 1)$. Hence the scaled energy gap does depend on the boundary conditions and instead of equation (9) we get for $N \to \infty$ 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.

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

Equation (61) on page 2471 should read

$$(\Theta_{\mu\nu})_{j} = (\Theta_{\nu\mu})_{j} = \frac{1}{2} [(T_{\mu\nu})_{j} + (T_{\nu\mu})_{j}]$$

= $(T_{\mu\nu})_{j} - \frac{1}{4} i(\hbar/mc) \varepsilon_{\mu\nu\kappa\lambda} \partial_{\kappa} (J'_{\lambda})_{j}.$ (61)