Quantum fluid dynamics within a relativistic density-functional framework

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

(http://iopscience.iop.org/0305-4470/18/1/529)

J. Phys. A: Math. Gen. **18** (1985) 187. Printed in Great Britain

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:

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

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 $N \to \infty$ in leading order of N:

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

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

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

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

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

0305-4470/85/010187+01$02.25