Quantum fluid dynamics within a relativistic density-functional framework

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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:

$$
\begin{equation*}
N E N_{N}^{(\mathrm{B})}(\lambda=1)=-N E_{N}^{(\mathrm{A})}(\lambda=1)+2 N \Lambda\left(\frac{1}{2}\right) . \tag{6}
\end{equation*}
$$

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

$$
\begin{aligned}
& N E_{N}^{(A)}(\lambda=1)=\frac{1}{2} \pi \gamma \\
& N E_{N}^{(\mathrm{B})}(\lambda=1)=\frac{3}{2} \pi \gamma \\
& N E_{N}^{(\mathrm{C})}(\lambda=1)=\pi \gamma
\end{aligned}
$$

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

$$
\begin{align*}
\left(\Theta_{\mu \nu}\right)_{j} & =\left(\Theta_{\nu \mu}\right)_{j}=\frac{1}{2}\left[\left(T_{\mu \nu}\right)_{j}+\left(T_{\nu \mu}\right)_{j}\right] \\
& =\left(T_{\mu \nu}\right)_{j}-\frac{1}{4} 1(\hbar / m c) \varepsilon_{\mu \nu \kappa \lambda} \partial_{\kappa}\left(J_{\lambda}^{\prime}\right)_{j} . \tag{61}
\end{align*}
$$

