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CORRECTION

Correction to: A Simple Kinetic Model for the Phase Transition of the van der Waals Fluid

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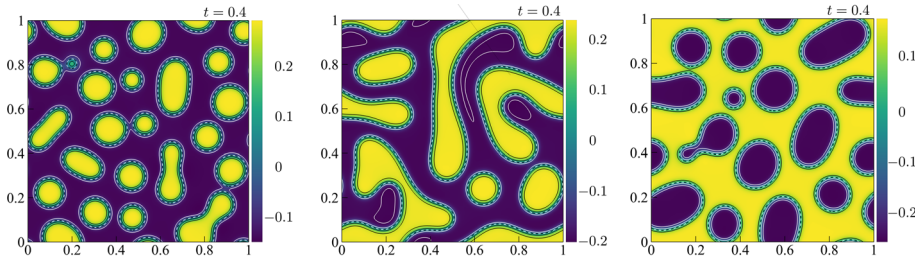
Correction to: J Stat Phys (2018) 172: 880–903 https://doi.org/10.1007/s10955-018-2068-z

In the original article, $\tilde{x}$ in (69a) should read x and the last line of (70a) should be replaced by

$$- K\delta_h^2[\delta_h^2[\chi](x,y)](x,y) - K\delta_{hx}[\chi](x,y)\delta_{hx}[\delta_h^2[\chi](x,y)](x,y)$$
$$- K\delta_{hy}[\chi](x,y)\delta_{hy}[\delta_h^2[\chi](x,y)](x,y).$$

The error in (70a) affects the numerical results for 2D cases presented in Figs. 5, 6, and 7b, though their characteristic features remain unchanged. The corrected Figs. 5, 6, and 7b are shown below.



(a) $c = 3.8,\ \chi_{\rm av} = 17/60$ **(b)** $c = 3.8,\ \chi_{\rm av} = 1/3$ **(c)** $c = 3.8,\ \chi_{\rm av} = 23/60$

Fig. 5 Contour plots of the rescaled density χ on the xy-plane: two coexisting phases at the instance $t = 0.400$ induced by an Gaussian noise (with the standard deviation of 0.001) disturbance of an initial uniform state. The scale number in the legend indicates the value of $\chi - \chi_{\rm av}$. The contours are drawn with the interval of 0.1. The contour of $\chi = \chi_{\rm av}$ is drawn by a dotted line, while other contours by solid lines

The original article can be found online at https://doi.org/10.1007/s10955-018-2068-z.

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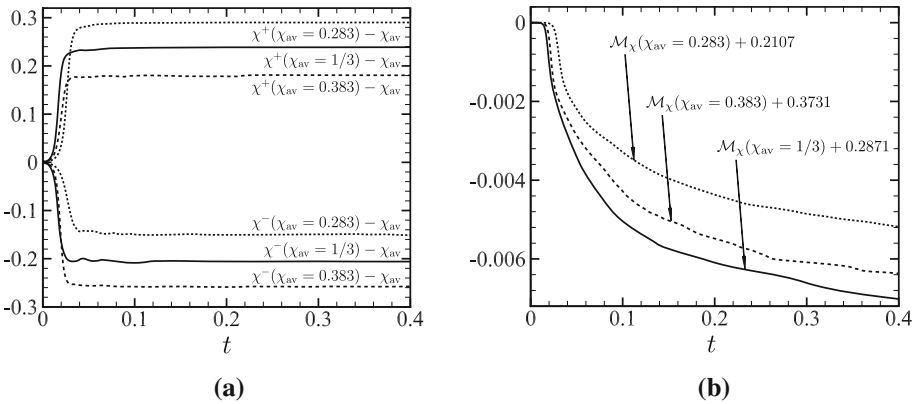

Fig. 6 Time evolution of the maximum/minimum of χ, say χ^+ and χ^-, and that of the system total free energy M_χ in two dimensional cases. **a** $\chi^\pm$ vs. t, **b** M_χ vs. t. Two parameters K and c are commonly set as $K = 4.3976 \times 10^{-5}$ and $c = 3.8$, while the values of χ_{av} are shown in the figure. The initial values of M_χ are -0.2107, -0.2871, and -0.3731 for $\chi_{av} = 0.283(= 17/60)$, $1/3$, and $0.383(= 23/60)$, respectively

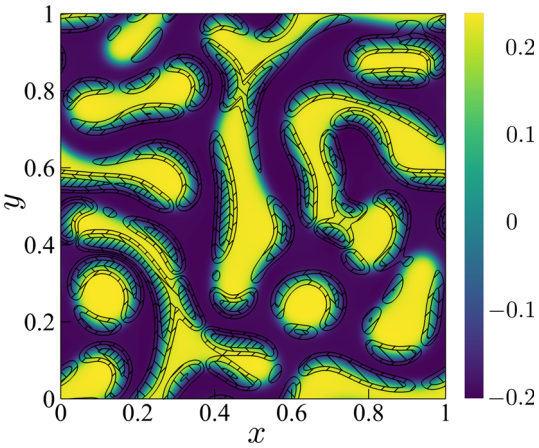

Fig. 7 Grid dependence of the results for the case $c = 3.8$, $\chi_{av} = 1/3$, and $K = 4.3976 \times 10^{-5}$. **b** The difference Δ at $t = 0.2$ between the results with standard and double-size coarse grids in the 2D simulation. The three types of hatched area, namely the upward hatched area with wide interval, the downward hatched area, and the upward hatched area with narrow interval, represent the area where $0.003 < \Delta < 0.01$, $0.01 < \Delta < 0.03$, and $0.03 < \Delta$. The scale in the legend shows $\chi - \chi_{av}$

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