

Erratum: Constrained systems and statistical distribution
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The equations of motion (23) are incorrect since they produce an extra V^{-1} term in the probability, rather than the isobaric-isothermal one with conserved center of mass position, as seen by comparing Eqs. (26) and (27). A corrected form of the equations of motion reads

$$\dot{r}_i = p_i/m_i + \eta(r_i - R_o),$$

$$\dot{p}_i = F_i - (\zeta + \eta)(p_i - m_i P_o/M_o),$$

$$\dot{\zeta} = \frac{2}{\tau_T^2 3NkT_o} \left(K - \frac{P_o^2}{2M_o} - \frac{3(N-1)kT_o}{2} \right) - 3\eta\zeta,$$

$$\dot{s} = (3N-3)s\zeta,$$

$$\dot{\eta} = \frac{V}{\tau_P^2 NkT_o} \left(\frac{2K + W - P_o^2/M_o}{3V} - A_o \right) + 3\frac{\tau_T^2}{\tau_P^2} \zeta^2,$$

$$\dot{V} = 3V\eta.$$

The compensating terms $-3\eta\zeta$ and $+3(\tau_T^2/\tau_P^2)\zeta^2$ do not alter the conservation laws (24) and are introduced to obtain $\sqrt{g} = 1$, correcting the V^{-1} factor in the probability [Eqs. (26) and (31)]. The same compensating terms need to be introduced for the constrained isobaric-isothermal case, Eq. (29). The author regrets any confusion the error may have caused.