Corrections

The multiconfiguration time-dependent Hartree (MCTDH) method: A highly efficient algorithm for propagating wavepackets

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In Eqs. (B.31), (B.33), and (B.40) a "π" is missing.
In Eq. (B.43) the expression $(l+m)!/(l-m)!$ is to be replaced by its reciprocal value.
In Eq.(B.51) c_{l-1}^2 must be replaced by c_{l+1}^2
In Eq.(B.65) $-\frac{1}{3}$ must be replaced by $\frac{1}{3}$

The corrected equations read:

$$\begin{aligned}\varphi_j(x) &= \left(2^j j!\right)^{-1/2} (m\omega/\pi)^{1/4} H_j\left(\sqrt{m\omega}\,(x-x_{\rm eq})\right) \\ &\quad \times \exp\left(-\tfrac{1}{2}\, m\omega\,(x-x_{\rm eq})^2\right) \end{aligned} \tag{B.31}$$

$$w_\alpha^{1/2} = (m\omega/\pi)^{-1/4} \exp\left(\tfrac{1}{2}\, m\omega\,(x_\alpha - x_{\rm eq})^2\right) U_{0\alpha} \tag{B.33}$$

$$w_\alpha^{1/2} = \pi^{1/4}\,(m\omega)^{-3/4}\,(x-x_0)^{-1} \exp\left(\tfrac{1}{2}\, m\omega\,(x_\alpha - x_{\rm eq})^2\right) U_{1\alpha} \tag{B.40}$$

$$\varphi_{l-m+1}(\theta) = \tilde{P}_l^m(\theta) = (-1)^m \sqrt{\frac{2\,l+1}{2}\,\frac{(l-m)!}{(l+m)!}}\, P_l^m(\cos\theta) \tag{B.43}$$

$$c_{l+2}\, c_{l+1}\, \tilde{P}_{l+2}^m(x) + \left(c_l^2 + c_{l+1}^2 - x^2\right) \tilde{P}_l^m(x) + c_l\, c_{l-1}\, \tilde{P}_{l-2}^m(x) = 0 \tag{B.51}$$

$$D_{\alpha\beta}^{(2),\rm DVR} = -\left(\tfrac{\pi}{\Delta x}\right)^2 \begin{cases} \frac{1}{3} + \frac{1}{6\,(N+1)^2} - \frac{1}{2\,(N+1)^2 \sin^2\left(\frac{\alpha\,\pi}{N+1}\right)}\,, & \alpha = \beta \\ \frac{2\,(-1)^{\alpha-\beta}}{(N+1)^2}\, \frac{\sin\left(\frac{\alpha\,\pi}{N+1}\right) \sin\left(\frac{\beta\,\pi}{N+1}\right)}{\left(\cos\left(\frac{\alpha\,\pi}{N+1}\right) - \cos\left(\frac{\beta\,\pi}{N+1}\right)\right)^2}\,, & \alpha \neq \beta \end{cases} \tag{B.65}$$

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