Corrigenda

A. GANDINI, "Generalized Perturbation Theory for Nonlinear Systems from the Importance Conservation Principle," *Nucl. Sci. Eng.*, **77**, 316 (1981).

Although the final Eq. (44) governing the second-order auxiliary functions $\tilde{\boldsymbol{f}}_{l/ij}$ is correct, the procedure for its derivation should be modified as follows. Instead of Eq. (40), governing functions $\boldsymbol{f}_{l/ij}$, consider the equation

$$\frac{\partial \tilde{\boldsymbol{f}}_{l/ij}}{\partial t} = \mathsf{M}\tilde{\boldsymbol{f}}_{l/ij} + \frac{2}{\alpha_i + \alpha_j}(\boldsymbol{s}_{l/ij} + \boldsymbol{s}_{l/ji}) + \frac{2}{\alpha_i + \alpha_j}\mathsf{N}\left(\frac{d^2\boldsymbol{f}}{dp_i dp_j}\right)\boldsymbol{f} \ , \quad (40)$$

with α_r defined by Eq. (14), governing the sum functions

$$\tilde{\boldsymbol{f}}_{l/ij} = \frac{2}{\alpha_i + \alpha_j}(\boldsymbol{f}_{l/ij} + \boldsymbol{f}_{l/ji}) \ . \quad (41)$$

Since the second-order term contribution $\hat{\boldsymbol{f}}_{(2)}$ to $\delta\boldsymbol{f}$ results in

$$\hat{\boldsymbol{f}}_{(2)} = \sum_{i \leq j=1}^{J} \tilde{\boldsymbol{f}}_{l/ij}\delta p_i \delta p_j \ , \quad (42)$$

we can write

$$\tilde{\boldsymbol{f}}_{l/ij} = \frac{2}{\alpha_i + \alpha_j}\frac{d^2\boldsymbol{f}}{dp_i dp_j} \ . \quad (43)$$

Equation (40) then reduces to Eq. (44) of the original paper.

By a quite analogous procedure, instead of Eq. (B.25) of Appendix B, relevant to functions $\boldsymbol{f}_{l/ij}$, the following equation should be derived:

$$\frac{\partial \tilde{\boldsymbol{f}}_{l/ij}}{\partial t} = \mathsf{H}\tilde{\boldsymbol{f}}_{l/ij} + \tilde{\boldsymbol{s}}_{l/ij} \ ,$$

relevant to the sum functions $\tilde{\boldsymbol{f}}_{l/ij}$, here also defined by the above expression (41) [so that the second-order term contribution $\hat{\boldsymbol{f}}_{(2)}$ to $\delta\boldsymbol{f}$ will again be represented by the above Eq. (42)]. The correct expression of the source term $\tilde{\boldsymbol{s}}_{l/ij}$ at the right side results, i.e.,

$$\tilde{\boldsymbol{s}}_{l/ij} = \frac{1}{\alpha_i + \alpha_j}\left[2\frac{\partial^2 \boldsymbol{m}}{\partial p_i \partial p_j} + \boldsymbol{\zeta}_{ij}(\boldsymbol{f}_{l/i}, \boldsymbol{f}_{l/j}) + \boldsymbol{\zeta}_{ji}(\boldsymbol{f}_{l/j}, \boldsymbol{f}_{l/i})\right] \ ,$$

where $\boldsymbol{\zeta}_{ij}$ as defined by Eq. (B.12) is not symmetrical with respect to indices i and j. For this same reason, vector $\boldsymbol{\zeta}_{ij}$ in the last term at the right side of the perturbative Eq. (B.26) should be replaced by $\frac{1}{2}(\boldsymbol{\zeta}_{ij} + \boldsymbol{\zeta}_{ji})$.

C. R. MAROTTA, "Response to 'Neutron Lifetime, Generation Time, and Reproduction Time,'" *Nucl. Sci. Eng.*, **78**, 106 (1981).

In the third paragraph of the right column, p. 106, fifth line, replace "and" by "−". The statement should be $E = l - g = 0$. *Nuclear Science and Engineering* apologizes for this error.