$I_{2r}$, $r = 1, \cdots, l$, do not distinguish between the representations $\Delta^+$ and $\Delta^-$.

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# Addendum: One-Speed Neutron Transport in Two Adjacent Half-Spaces†

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The interface current for the problem of two half-spaces with a constant source in one half-space is obtained in closed form.

THE interface current is

$$j(0) = \int_{-1}^{1} \mu\psi(0, \mu)\, d\mu,$$

or

$$j(0) = -\lim_{z\to\infty} z \int_{-1}^{1} d\mu\, \frac{\mu\psi(0, \mu)}{\mu - z}.$$

Using[1] Eq. (V-9) for $\psi(0, \mu)$, Eq. (III-13) and (III-14), and

$$z^2\chi(-z) + 1 = \frac{c_1}{2(1 - c_1)} \int_{-1}^{0} \frac{\mu^3 X_2(\mu)\, d\mu}{X_1(\mu)(\nu_{01}^2 - \mu^2)(\mu - z)} + \frac{c_2}{2(1 - c_2)} \int_{0}^{1} \frac{\mu^3 X_1(-\mu)\, d\mu}{X_2(-\mu)(\nu_{02}^2 - \mu^2)(\mu - z)},$$

we obtain

$$j(0) = \frac{2s(\nu_{02} - \nu_{01})(1 - c_2)}{c_1 - c_2}.$$

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[1] I. Kuscer, N. J. McCormick, and G. C. Summerfield, Ann. Phys. (N. Y.) (To be published).