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Erratum

Erratum to "Electro-elastic analysis of a bimaterial piezoelectric wedge with an interface crack under antiplane concentrated forces and inplane surface charges" [Int. J. Solids Struct. 41 (2004) 4179–4196]

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Eqs. (42)–(45) in the original paper should be replaced by the following equations:

$$\begin{aligned}
&\frac{1}{2\pi \mathrm{i}}\int_{c-\mathrm{i}\infty}^{c+\mathrm{i}\infty}\left[\frac{\cos(p\theta)}{p}+\frac{\sin(p\alpha)\sin(p\theta)}{p\cos(p\alpha)}\right]\left[\int_a^b f(v)\left(\frac{v}{r}\right)^p \mathrm{d}v\right]\mathrm{d}p\\
&\quad=\frac{1}{2\pi \mathrm{i}}\int_{c-\mathrm{i}\infty}^{c+\mathrm{i}\infty}\left[\frac{\cos(p\theta)}{p}+\frac{\sin(p\alpha)\sin(p\theta)}{p\cos(p\alpha)}\right]\left[\int_a^r f(v)\left(\frac{v}{r}\right)^p \mathrm{d}v+\int_r^b f(v)\left(\frac{v}{r}\right)^p \mathrm{d}v\right]\mathrm{d}p\\
&\quad=\sum_{n=1}^{\infty}\frac{\left[\int_a^r f(v)\left(\frac{v}{r}\right)^{p_n}\mathrm{d}v-\int_r^b f(v)\left(\frac{v}{r}\right)^{-p_n}\mathrm{d}v\right]\cos(p_n\alpha-p_n\theta)}{p_n\alpha\sin(p_n\alpha)}-\int_a^r f(v)\mathrm{d}v,\quad a\leqslant r\leqslant b
\end{aligned}\tag{42}$$

$$\begin{aligned}
&\frac{1}{2\pi \mathrm{i}}\int_{c-\mathrm{i}\infty}^{c+\mathrm{i}\infty}\left[\frac{\cos(p\theta)}{p}+\frac{\sin(p\alpha)\sin(p\theta)}{p\cos(p\alpha)}\right]\left[\int_a^b g(v)\left(\frac{v}{r}\right)^p \mathrm{d}v\right]\mathrm{d}p\\
&\quad=\sum_{n=1}^{\infty}\frac{\left[\int_a^r g(v)\left(\frac{v}{r}\right)^{p_n}\mathrm{d}v-\int_r^b g(v)\left(\frac{v}{r}\right)^{-p_n}\mathrm{d}v\right]\cos(p_n\alpha-p_n\theta)}{p_n\alpha\sin(p_n\alpha)}-\int_a^r g(v)\mathrm{d}v,\quad a\leqslant r\leqslant b
\end{aligned}\tag{43}$$

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$$
\begin{aligned}
w^{(1)} = {} & \left(\frac{f_7}{f_4}\right)\left(\frac{-2}{\pi}\right)\sum_{n=1}^{\infty}\frac{(-1)^n}{2n-1}\left(\frac{r}{h}\right)^{p_n}\sin(p_n\theta) \\
& - \left(\frac{f_2}{f_3}\right)\sum_{n=1}^{\infty}\frac{\left[\int_a^r f(v)\left(\frac{v}{r}\right)^{p_n}\mathrm{d}v - \int_r^b f(v)\left(\frac{v}{r}\right)^{-p_n}\mathrm{d}v\right]\cos(p_n\alpha - p_n\theta)}{p_n\alpha\sin(p_n\alpha)} \\
& + \left(\frac{f_1}{f_3}\right)\sum_{n=1}^{\infty}\frac{\left[\int_a^r g(v)\left(\frac{v}{r}\right)^{p_n}\mathrm{d}v - \int_r^b g(v)\left(\frac{v}{r}\right)^{-p_n}\mathrm{d}v\right]\cos(p_n\alpha - p_n\theta)}{p_n\alpha\sin(p_n\alpha)} \\
& + \left(\frac{f_2}{f_3}\right)\int_a^r f(v)\mathrm{d}v - \left(\frac{f_1}{f_3}\right)\int_a^r g(v)\mathrm{d}v, \quad a \leqslant r \leqslant b
\end{aligned} \tag{44}
$$

$$
\begin{aligned}
\phi^{(1)} = {} & \left(\frac{f_8}{f_4}\right)\left(\frac{-2}{\pi}\right)\sum_{n=1}^{\infty}\frac{(-1)^n}{2n-1}\left(\frac{r}{h}\right)^{p_n}\sin(p_n\theta) \\
& + \left(\frac{f_5}{f_3}\right)\sum_{n=1}^{\infty}\frac{\left[\int_a^r f(v)\left(\frac{v}{r}\right)^{p_n}\mathrm{d}v - \int_r^b f(v)\left(\frac{v}{r}\right)^{-p_n}\mathrm{d}v\right]\cos(p_n\alpha - p_n\theta)}{p_n\alpha\sin(p_n\alpha)} \\
& - \left(\frac{f_6}{f_3}\right)\sum_{n=1}^{\infty}\frac{\left[\int_a^r g(v)\left(\frac{v}{r}\right)^{p_n}\mathrm{d}v - \int_r^b g(v)\left(\frac{v}{r}\right)^{-p_n}\mathrm{d}v\right]\cos(p_n\alpha - p_n\theta)}{p_n\alpha\sin(p_n\alpha)} \\
& - \left(\frac{f_5}{f_3}\right)\int_a^r f(v)\mathrm{d}v + \left(\frac{f_6}{f_3}\right)\int_a^r g(v)\mathrm{d}v, \quad a \leqslant r \leqslant b
\end{aligned} \tag{45}
$$

The corrections will not affect all other analytical solutions (e.g. $\sigma_{\theta z}, D_\theta, K_{\mathrm{III}}^{\sigma}, K_{\mathrm{III}}^{D}$, etc.) such that the numerical results discussed in the original paper remain valid.