

Correction

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Correction to 'Homogenized boundary conditions and resonance effects in Faraday cages'

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- The Neumann boundary conditions (3.6), (3.9), (3.26), (A 11), (A 15), (A 22), (A 27) and (A 31) are applicable only when K is symmetrical with respect to η . More generally they should be replaced by periodic boundary conditions on $S = \pm\frac{1}{2}$.
- Equation (4.25) should read

$$\begin{aligned} \Phi(N, S, s) = & -\frac{\partial\phi_{-1}^{-}}{\partial n}(s)\Phi^{-}(N, S) \\ & -\varepsilon\kappa(s)\frac{\partial\phi_{-1}^{-}}{\partial n}(s)\tilde{\Phi}^{-}(N, S) \\ & -\varepsilon\frac{\partial^2\phi_{-1}^{-}}{\partial n\partial s}(s)\hat{\Phi}^{-}(N, S) \\ & +\varepsilon\frac{\partial\phi_0^{+}}{\partial n}(s)\Phi^{+}(N, S) \\ & -\varepsilon\frac{\partial\phi_0^{-}}{\partial n}(s)\Phi^{-}(N, S) + \mathcal{O}(\varepsilon^2) \quad (4.25') \end{aligned}$$

- Equations (4.26) and (4.27) should read

$$\begin{aligned} & -(\tau_{-} - \varepsilon\kappa\tilde{\tau}_{-})\frac{\partial\phi_{-1}^{-}}{\partial n} - \varepsilon\hat{\tau}_{-}\frac{\partial^2\phi_{-1}^{-}}{\partial n\partial s} \\ & +\varepsilon\sigma_{+}\frac{\partial\phi_0^{+}}{\partial n} - \varepsilon\tau_{-}\frac{\partial\phi_0^{-}}{\partial n} \\ & = \phi_0^{+} + \varepsilon\phi_1^{+} \quad \text{on } \Gamma \quad (4.26') \end{aligned}$$

and

$$-(\sigma_{-} - \varepsilon\kappa\tilde{\sigma}_{-})\frac{\partial\phi_{-1}^{-}}{\partial n} - \varepsilon\hat{\sigma}_{-}\frac{\partial^2\phi_{-1}^{-}}{\partial n\partial s}$$

$$\begin{aligned}
 & + \varepsilon \tau_+ \frac{\partial \phi_0^+}{\partial n} - \varepsilon \sigma_- \frac{\partial \phi_0^-}{\partial n} \\
 & = \frac{1}{\varepsilon} \phi_{-1}^- + \phi_0^- + \varepsilon \phi_1^- \quad \text{on } \Gamma
 \end{aligned} \tag{4.27'}$$

- The two lines following equation (4.30) should read:
 where $(\nabla^2 + k_*^2)\hat{\phi}_0^+ = f$ in Ω_+ with $\hat{\phi}_0^+ = 0$ on Γ , and $(\nabla^2 + k_*^2)\tilde{\phi}_0^+ = 0$ in Ω_+ with $\tilde{\phi}_0^+ = -\partial\psi/\partial n$ on Γ , with both $\hat{\phi}_0^+$ and $\tilde{\phi}_0^+$ satisfying the Sommerfeld radiation condition at infinity.
- The line following equation (4.33) should read:
 where $\tilde{\phi}_0^-$ is a particular solution of $(\nabla^2 + k_*^2)\tilde{\phi}_0^- = (I_2/I_1)\psi$ in Ω_- with $\tilde{\phi}_0^- = -\partial\psi/\partial n$ on Γ , and
- Equation (A 18) should read:

$$\begin{aligned}
 \Phi \sim & \mp \frac{1}{2} \varepsilon \kappa A_0^\pm N^2 \pm (A_0^\pm + \varepsilon A_1^\pm) N + A_0^\pm \sigma_\pm + A_0^\mp \tau_\mp \\
 & + \varepsilon A_1^\pm \sigma_\pm + \varepsilon A_1^\mp \tau_\mp \pm \varepsilon \kappa A_0^\pm \tilde{\sigma}_\pm \mp \varepsilon \kappa A_0^\mp \tilde{\tau}_\mp + \varepsilon \frac{\partial A_0^\pm}{\partial s} \hat{\sigma}_\pm + \varepsilon \frac{\partial A_0^\mp}{\partial s} \hat{\tau}_\mp + \mathcal{O}(\varepsilon^2) \quad (\text{A } 18')
 \end{aligned}$$