Errata

Page 6 — *line 5 :* *position* instead of *positive*.

Page 109 — *line 6 :* artificial singularity at $-1/2$ (instead of -1).

Page 111 — *line 17 :* $F(w) = f(1/w)$ instead of $f(1/z)$.

Page 115 — *line 12 :* The formula should read $2\pi\mathrm{i}\, a_{-1}\ \mathrm{Ind}_\gamma(0)$ and not $2\pi\mathrm{i}\, a_{-1}\ \mathrm{Ind}_\gamma(z)$.

Page 121 — *line 5 :* A minus sign should be a "plus" in the formula :

$$\mathrm{Res}\left(\frac{\mathrm{e}^{\mathrm{i}kz}}{z^2+a^2}\,;\,\mathrm{i}a\right) = \lim_{z\to \mathrm{i}a}(z-\mathrm{i}a)\frac{\mathrm{e}^{\mathrm{i}kz}}{z^2+a^2} = \lim_{z\to \mathrm{i}a}\frac{\mathrm{e}^{\mathrm{i}kz}}{z+\mathrm{i}a} = \frac{\mathrm{e}^{-ka}}{2\mathrm{i}a},$$

Page 122 — *line 8 :* On the figure, ξ and ξ' have been permuted.

Page 150 — *line 6–7 :* A factor $\frac{1}{2}$ is missing to the right-hand side :

$$\mathrm{Re}\big\{f_\alpha(z) - f_\alpha(z_\alpha)\big\} = \tfrac{1}{2}\, r^2\rho\cos(2\varphi+\theta) + \mathrm{o}(r^2),$$
$$\mathrm{Im}\big\{f_\alpha(z) - f_\alpha(z_\alpha)\big\} = \tfrac{1}{2}\, r^2\rho\sin(2\varphi+\theta) + \mathrm{o}(r^2).$$

Page 200 — *line −4 :* The last formula should read

$$j'_x(\boldsymbol{x}', t) = \gamma\big(j_x(\boldsymbol{x}, t) - c\beta\rho(\boldsymbol{x}, t)\big).$$

instead of $\boldsymbol{j}' = \cdots$

Page 239 — *line 13 :* Read "The convolution inverse of $[\delta' + \alpha\delta]$ in $\mathscr{D}'_+$" (instead of $[\delta + \alpha\delta']$).

Page 266 — *line 4 :* the formulae should read:

$$f(t) = \frac{a_0}{2\sqrt{a}} + \frac{1}{\sqrt{a}}\sum_{n=1}^{+\infty}\left[a_n\cos\left(2\pi n\frac{t}{a}\right) + b_n\sin\left(2\pi n\frac{t}{a}\right)\right]$$

and

$$\frac{|a_0|^2}{4} + \frac{1}{2}\sum_{\substack{n=-\infty\\ n\neq 0}}^{+\infty}\left(|a_n|^2 + |b_n|^2\right) = \int_0^a \big|f(t)\big|^2\,\mathrm{d}t.$$

Page 403 — *line −2 :* Read $H\varphi$ instead of $H\psi$.

Page 410 — In Equations (15.2) and next, π should be squared:

$$(-4\pi^2\nu^2 + \omega_0^2)\,\widetilde{G}(\nu) = 1 \qquad (15.2)$$

$$\widetilde{G}(\nu) = \frac{1}{\omega_0^2 - 4\pi^2\nu^2}. \qquad \text{(naive solution)}$$

Page 414 — *line −4 :* The integration variables should be t' and $\boldsymbol{r}'$:

$$\mathbf{A}(\boldsymbol{r}, t) = [G * \mathbf{j}](\boldsymbol{r}, t) = \iiint_{\mathbb{R}^3}\int_{-\infty}^{+\infty} G(\boldsymbol{r}-\boldsymbol{r}', t-t')\,\mathbf{j}(\boldsymbol{r}', t')\,\mathrm{d}t'\,\mathrm{d}^3\boldsymbol{r}'$$

Page 416 — *line 2 :* $(2\pi)^3$ should be changed to $(2\pi)^4$.

Page 425 — *line 11 :* The integration variables should be t' and x':

$$\mathcal{T}(x,t) = [G*\rho](x,t) = \int_{-\infty}^{\infty}\int_0^{+\infty} G(x',t')\,\rho(x-x', t-t')\,\mathrm{d}t'\,\mathrm{d}x'. \quad (15.14)$$

line −6 : The integration variable should be x':

$$\mathscr{T}(x,t) = c\int_{-\infty}^{+\infty} G(x-x', t)\,T_0(x')\,\mathrm{d}x'.$$

Page 426 — *line 21 :* The integration variable should be $\boldsymbol{r}'$:

$$T(\boldsymbol{r}, t) = c\,\big[T_0 * G\big](\boldsymbol{r}, t) = \iiint c\,T_0(\boldsymbol{r}')\,G(\boldsymbol{r}-\boldsymbol{r}', t)\,\mathrm{d}^3\boldsymbol{r}'.$$

Page 470 — *line 3 :* Read

$$\omega^2 = f_{12}\,\mathrm{d}x^1\wedge\mathrm{d}x^2 + f_{13}\,\mathrm{d}x^1\wedge\mathrm{d}x^3 + \cdots + f_{1n}\,\mathrm{d}x^1\wedge\mathrm{d}x^n$$

Page 481 — *line 2 :* Read : "are denoted in *covariant* notation" (instead of "contravariant notation").

Page 527 — *line 15 :* Definition 20.15: the **expectation** is defined "if this series converges *absolutely*."