

Correction to Groups, Representations and Physics (2nd Edition)

- p. 69, line 7
Insert $\delta^{\mu\nu}$ at end of item (3), which should read
(3) orthogonality: $\sum k_i \chi_i^{(\mu)} \chi_i^{(\nu)*} = [g] \delta^{\mu\nu}$;
- p. 89, 2nd. line after Eq. (5.22')
 $D^{(3)} \equiv B_2$ should be $D^{(4)} \equiv B_2$
- p. 99, unnumbered equation after Eq. (6.8)
Add $+O(\varphi^2)$ at end of first line, as in the second line
- p. 99, unnumbered equation at bottom of page
There should be a $1/n!$ in the summation, i.e.
 $\exp(-i\varphi X) = \sum_0^\infty (-i\varphi)^n X^n / n!$
- p. 100, 2 lines before Eq. (6.10)
This is not exactly a mistake, but it would be better if $R(\varphi)R(\varphi')$ were replaced by $R(\varphi')R(\varphi)$, i.e. $R(\varphi')R(\varphi) = R(\varphi + \varphi')$
- p. 142, 4th line
The argument of U_{-n} should be $4\pi - \theta$, i.e.
 $U_n(\theta) = U_{-n}(4\pi - \theta)$
- p. 171, Eq. (9.18)
The $\delta_{\alpha\beta}$ should be $g_{\alpha\beta}$
(This correction may have already been made.)
- p. 232, unnumbered equation after Eq. (11.30) and last line of paragraph
 m should be replaced by $m\beta$. So the equation should read

$$\begin{aligned} i \frac{\partial \psi}{\partial t} &= (-i\gamma_0 \boldsymbol{\gamma} \cdot \boldsymbol{\nabla} + m\beta) \psi \\ &= (-i\boldsymbol{\alpha} \cdot \boldsymbol{\nabla} + m\beta) \psi \end{aligned}$$
 and the last line should read $H = \boldsymbol{\alpha} \cdot \hat{\mathbf{p}} + m\beta$.
- p. 294, solution 1.7, third line
(4 5 6) should be replaced by (4 6 5)
That is, $\Pi(c) = (1\ 2\ 3)(4\ 6\ 5)$.