Quantum Theory, Groups and Representations: Errata

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April 25, 2019

The following are errata for the version of the book published by Springer. These may or may not have yet been fixed in versions of the book available from Springer.

Page viii:
To the list of those helpful with suggestions for improving the text, add Alain Bossavit and John Stroughair.

Page 8:
The first line of the equation at the bottom of the page would more clearly be written as

\[ g_1 \cdot (g_2 \cdot f)(x) = (g_2 \cdot f)(g_1^{-1} \cdot x) \]

Page 64:
In the figure, replace “x” with “X”.

Page 119:
The last equation in the page should be

\[ L_3 = i \rho'(l_3) = i \left( x_2 \frac{\partial}{\partial x_1} - x_1 \frac{\partial}{\partial x_2} \right) = -i \frac{\partial}{\partial \phi} \]

Page 288:
Last two equations should be

\[ q(0) = c_+ + c_- = 2 \text{Re}(c+), \quad p(0) = i m \omega (c_+ - c_-) = -2m \omega \text{Im}(c_+) \]

\[ c_+ = \frac{1}{2} q(0) - i \frac{1}{2m \omega} p(0) \]

Page 289:
First two equations should be

\[ q(t) = \left( \frac{1}{2} q(0) - i \frac{1}{2m \omega} p(0) \right) e^{i \omega t} + \left( \frac{1}{2} q(0) + i \frac{1}{2m \omega} p(0) \right) e^{-i \omega t} \]
\[ p(t) = \left( \frac{im\omega}{2} q(0) + \frac{1}{2} p(0) \right) e^{i\omega t} + \left( \frac{-im\omega}{2} q(0) - \frac{1}{2} p(0) \right) e^{-i\omega t} \]
Page 356:
Near middle of page, replace $H_B \otimes F_d^+$ by $H_B \otimes F_1^+$.

Page 600:
Instead of
\[ H_1 \otimes C = M_{j_r}^+ \oplus M_{j_r}^- \]
read
\[ M \otimes C = M_{j_r}^+ \oplus M_{j_r}^- \]

Page 601:
First line, replace $\alpha_{\mu}(p)$ by $\alpha = (\alpha_0(p), \alpha(p))$.
Replace equation 46.22 by
\[
\langle \alpha, \alpha' \rangle = \int_{\mathbb{R}^3} (-\bar{\alpha}_0(p)\alpha'_0(p) + \bar{\alpha}(p) \cdot \alpha'(p)) d^3p
\]
Replace occurrences of $H_1^{++}$ and $H_1^{++'}$ with $H_1'$ and $H_1''$ respectively.