

Additional list of errata to the Dover edition of **QUANTUM FIELD THEORY**

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CHAPTER 1

Page 12, line 16 and line -4,
and in Chap 3, page 128, line 7, in Chap. 12, page 567, 1 line above (12-24), and in the
Index, page 703,
instead of “*Lorentz gauge*”, read “*Lorenz gauge*”.

I’m very grateful to Jean Iliopoulos for pointing out to me this unfortunate but
widespread confusion between Ludvig Lorenz and Hendrik Lorentz.

CHAPTER 2

Page 66, last line ,
instead of “ $(i\boldsymbol{\alpha} \cdot \mathbf{E} + \boldsymbol{\sigma} \cdot \mathbf{B})$ ”, read “ $(i\boldsymbol{\alpha} \cdot \mathbf{E} - \boldsymbol{\Sigma} \cdot \mathbf{B})$ ”.

(The notation $\boldsymbol{\Sigma} = \begin{pmatrix} \boldsymbol{\sigma} & 0 \\ 0 & \boldsymbol{\sigma} \end{pmatrix}$ has been introduced below eq. (2-45).)

Many thanks to André Walker-Loud and Carl Carlson who detected that wrong sign.

CHAPTER 7

Page 356, lines -3 and -2
instead of “*divide the coefficient of the multilinear combination $\prod_1^4 f^{(i)}$ by 4!*”
read “*identify the coefficient of the multilinear combination $\prod_1^4 f^{(i)}$.*”.

Page 357, first line of eq. (7-97)
instead of “ $M = -\frac{i\alpha^2}{45m^4} \frac{1}{12} [\cdot \cdot \cdot]$ ”
read “ $M = -\frac{2i\alpha^2}{45m^4} [\cdot \cdot \cdot]$ ”.

Page 358, eq. (7-101)
instead of “ $\left(\frac{56}{11}\right)$ ”
read “ $\left(\frac{56}{5}\right)$ ”.

All my gratitude to Jose Manuel Davila, Christian Schubert and Anabel Trejo for
drawing my attention to these errors.

CHAPTER 11

Page 549, eqn. (11-182), the denominator of the last term should read $(f_\pi^2 - \pi^2)$ (no square
root !)

My friend Andrea Cappelli found that misprint, many thanks to him!

APPENDIX

Page 693, one line below eq. (A-19)

instead of “*while the corresponding identity for two anticommuting spin $\frac{1}{2}$ fields involves an extra minus sign*”

read “*while the corresponding identity for two anticommuting spin $\frac{1}{2}$ fields involves a \dagger instead of $*$ and the sign is the same*”.

I am grateful to Tobias Hurth and Raymond Stora for pointing out this mistake.

Page 695, eq. (A-26)

instead of “ $U = \dots = \frac{1}{\sqrt{2}} \begin{pmatrix} I & -I \\ I & I \end{pmatrix}$ ”

read “ $U = \dots = \frac{1}{\sqrt{2}} \begin{pmatrix} I & I \\ -I & I \end{pmatrix}$ ”.

Many thanks to Stefan Neumeier for pointing out this mistake.