

**Errata for the 2nd edition of  
“Lectures on Classical and Quantum Theory of Fields”**

page	is	should be
15, below (1.46)	$a_{\pm}(\vec{k}) = \frac{C(\pm\omega(\vec{k}), \pm\vec{k})}{(2\pi)^2 \sqrt{4\pi\omega(\vec{k})}}$	$a_{\pm}(\vec{k}) = \frac{C(\pm\omega(\vec{k})/c, \pm\vec{k})}{(2\pi)^2 \sqrt{4\pi\omega(\vec{k})}}$
30, the formula for $S_{\text{NG}}$	$-(\dot{X}^\mu \dot{X}_\mu)(X'^\mu X'_\mu)$	$-(\dot{X}^\mu \dot{X}_\mu)(X'^\nu X'_\nu)$
30, Exercise 2.2(a)	$dX^\mu(t, x) dX_\mu(t, s) = \dots$	$dX^\mu(t, s) dX_\mu(t, s) = \dots$
120, the first line	The functions $h_i(\vec{k})$	The test functions $h_i(\vec{k})$
136, formula (6.80)	$(v_r^\epsilon(\vec{p}))^\dagger v_s^{\epsilon'}(\vec{p}) = \dots$	$(v_r^{(\epsilon)}(\vec{p}))^\dagger v_s^{(\epsilon')}(\vec{p}) = \dots$
140, 12th line from the top	$\dots$ are absent. The $\dots$	$\dots$ are absent. Below we assume that $N \geq 1, M \geq 1$ . The $\dots$
140, 5th line from the bottom	$\sum_{n=0}^N r_n + \sum_{i=0}^M s_i$	$\sum_{n=1}^N r_n + \sum_{i=1}^M s_i$
140, formula (6.95)	$\sum_{i=0}^N \omega(\vec{q}_i) + \sum_{j=0}^M \omega(\vec{p}_j)$	$\sum_{i=1}^N \omega(\vec{q}_i) + \sum_{j=1}^M \omega(\vec{p}_j)$
141, formula (6.98)	$\sum_{j=1}^M p_i^k$	$\sum_{j=1}^M p_j^k$

page	is	should be
155, formula in the middle of the page	$\frac{d\hat{\phi}_I(t,\vec{x})}{dt} = \dots$	$\frac{\partial\hat{\phi}_I(t,\vec{x})}{\partial t} = \dots$
155, formula in the middle of the page	$\frac{d\hat{\pi}_I(t,\vec{x})}{dt} = \dots$	$\frac{\partial\hat{\pi}_I(t,\vec{x})}{\partial t} = \dots$
175 and 176, many places	$\left( : \tilde{V}_{Ig}[\tilde{\beta}] : \right)$	$\left( \tilde{V}_{Ig}[\tilde{\beta}] \right)$
193, formula (8.17)	$A_1^{ren} \binom{(0)^2}{k} = 0$	$A_1^{ren} ((\binom{(0)}{k})^2) = 0$
198, Fig. 8.9, the right leg of the graph	little right-arrow	little left-arrow
201 and 202, formulas (8.33), (8.34)	coefficient $\frac{\lambda_0^2}{12(2\pi)^8}$	without this coefficient
213, 2nd line from the top	$\dots$ the pair $(\lambda_0, m_0^2)$	$\dots$ the pair $(\lambda, m^2)$
232, formula (10.14)	$\tilde{U}(\sigma_0, L(\Lambda)a)$	$\tilde{U}(\sigma_0, \hat{L}(\Lambda)a)$
235, 5th line from the bottom	$\dots$ which $e^{i\chi(\Lambda)} = 1$ .	$\dots$ which one can choose $e^{i\chi(\Lambda)} = 1$ .
313, Fig. 13.4(a)	$p + g$	$p + q$