

## Errata: QFT and CMT

I am grateful to Ben Strekha for bringing the following to my attention.

Important errata in **boldface**

### Chapter 1

page 6, equation (1.41) shouldn't have a  $T$  in the denominator

page 9, 3 lines below equation (1.58),  $d = 3N - 1 \simeq 3N \rightarrow d - 1 = 3N - 1 \simeq 3N$

**page 16**, equation (1.120) is missing a  $dV$  in the numerator on the right hand side.

### Chapter 2

**page 23**, equation (2.23) and (2.24)  $dh \rightarrow \partial h$  and  $d^2h \rightarrow \partial^2h$  in the denominators

page 24, equation (2.25) is missing an  $i = 0$  in the limit of the sum

page 25, equation (2.28) the right hand side lower limit on sum:  $t_i = \pm \rightarrow t_i = \pm 1$

### Chapter 3

page 31, second line.  $U(x, x' : t) \rightarrow U(x, x'; t)$

page 32, equation (3.22) should have an index  $n$  for the sum.

page 37, equation (3.58).  $\langle s, \rangle \rightarrow \langle s \rangle$ .

**page 38**, in the sentence continuing after (3.60)  $\exp(2K^*) \rightarrow \exp(-2K^*)$ .

### Chapter 5

page 57, equation (5.24)  $\exp(-iS_c/\hbar) \rightarrow \exp(iS_c/\hbar)$ .

### Chapter 6

page 73, equation (6.2) drop the comma in  $|\theta, \phi \rangle$

page 89, equation (6.118) drop the vertical bar in  $e^{-\beta H}| \dots$

page 90, equation (6.127)  $\Psi(0) \rightarrow (\Psi(0))$ .

**page 92**, equation (6.142) is missing the integration measure  $d\tau$ .

**page 96**, equation (6.176) is missing the integration measure  $dx$

### Chapter 10

page 160, equation (10.18) is missing an "=" sign after lim

**page 162** Eqn. 10.27, the right hand side should be  $+\frac{1}{2\pi} \ln |\mathbf{r} - \mathbf{r}'|$ .

**page 165**, equation (10.36)  $e^S(s) \rightarrow e^{S(s)}$

page 167, second to last paragraph before 10.2.3  $t_i = s_1 s_{i+1} \rightarrow t_i = s_i s_{i+1}$ .

### Chapter 11

**page 173** Eqn. 10.61 RHS should read  $= \sum_{\alpha} g_{\alpha} \langle i | \mathcal{O} | j \rangle$ .

**page 190**, equation (11.44), exponent on right hand side:  $K'(s_0 s_1 + .. \rightarrow K'(s_1 s_2 + ...$

**page 194**, Figure 11.3 second  $K^* + \Delta K$  should be  $K^* + \Delta K'$

### Chapter 12

**page 205**, equation (12.36)  $3u_0 \rightarrow 4u_0$ .

Chapter 13 page 226, equation (13.11)  $S_0^*(\phi_f) \rightarrow S^*(\phi_f)$

page 226, equation (13.15) drop the comma after  $\phi$

page 226, equations (13.17) and (13.18)  $\mathbf{s} \rightarrow s$ .

**page 230**, equation (13.44)  $u_0 \rightarrow \frac{u_0}{(2!2!)}$ .

page 232, equation (13.53)  $u_0) \rightarrow u_0$

**page 235** before equation (13.76) "the  $u_0$  term in Eq. (13.66)"  $\rightarrow$  the " $u_0$  term in (13.67)".

page 237, equation (13.93) in the argument of  $\phi'$ ,  $0/s \rightarrow 0 \cdot s$ .

page 240, equation (13.111)  $t \rightarrow |t|$ .

**page 243**, equation (13.134)  $(4 - d) \rightarrow (d - 4)$  in the middle equality.

page 249, equation 3.157), (13.161), (13.162): need = sign after limits

#### Chapter 14

page 259, right after equation (14.51)  $\lambda_0^2 \rightarrow \lambda_0^2$

page 260, equation (14.52) and a sentence between (14.52) and (14.53)  $\lambda_0^2 \rightarrow \lambda_0^2$ .

page 260, after equation (14.53)  $\lambda_0^2 \rightarrow \lambda_0^2$

**page 260**, equation (14.54)  $\lambda^2 \rightarrow -\lambda^2$

page 261, equation (14.60)  $B(m_0^2 \rightarrow B(m_0..), \dots)$  and in the mini-paragraph following (14.60).

page 261, equation (14.61) and (14.62)  $\lambda_0^2 \rightarrow \lambda_0^2$

page 277, on (14.113) ,  $d \rightarrow \partial$ , in the next line  $\partial \rightarrow d$

#### Chapter 15

**page 287**, equation (15.12)  $e_2 \rightarrow \varepsilon_2$ .

#### Chapter 16

page 306, last paragraph: “could” repeated

Chapter 17 **page 321**, equation ((17.11)  $\exp(ipx) \rightarrow \exp(-ipx)$

page 332, equation (17.102) is missing a ”(” on the derivative term.

**page 329**, equation (17.76)  $\phi_+^2 \rightarrow \phi_+^2(0)$ .

**page 360** equation 18.168  $\delta \rightarrow \sqrt{\delta}$  within arctan.

**page 360** equation 18.171  $x = y \rightarrow x = -y$ .