ERRATA

p. 69: In the last paragraph of that page replace '... relation $+n \sim -n$ of points $n \in S^n$ ...' by '... relation $+s \sim -s$ of points $s \in S^n$ ...'.

p. 98: The first line following formula (5.56) begins with
'if $\psi(\boldsymbol{x}, t) = 0$ for $x \in \partial V$; again, the ...'
It is to be replaced by
'if $\psi(\boldsymbol{x}, t) = 0$ for $\boldsymbol{x} \in \partial V$; again, the ...'

p. 117: The second line following equation (5.165), which is
'where the matrix $\sigma^{\gamma\delta}$ must obey (5.161), which is solved by (5.160) and so the circle'
must be replaced by
'where the matrix $\sigma^{\gamma\delta}$ must obey (5.160), which is solved by (5.158) and so the circle'.

p. 121: Replace the line in the middle of that page
'matrix (6.11), to be read from the left to the right in the order as shown in (6.9).'
by
'matrix (6.11), to be read from the left to the right in the order as shown in (6.9) and (6.10).'

p. 165: In the References the following two literature items must be added:
Berezin F. A., Sov. J. Nucl. Phys. 30 (1979) 605
Berezin F. A., *Introduction to Superanalysis*, Reidel, Dordrecht 1987

p. 173: The reference to 'chap. 7.3' on this page, and also on the pages 312, 319 and 593 is wrong; it must be replaced by 'chap. 8' on Symmetries And Conservation Laws.

p. 204: Replace the two lines preceding (10.147), which are
'getting involved may neatly be visualized as depicted in fig. 10.2 below:
Finally, in the unitary gauge the leptonic part of the total action reads'
by
'getting involved may neatly be visualized as depicted in fig. 10.2 below. Finally, in the unitary gauge the leptonic part of the total action reads'.

p. 220: In the last paragraph of that page replace 'fig. 10.7' by 'fig. 10.8', 'fig. 10.8' by 'fig. 10.9', and 'fig. 10.9' by 'fig. 10.10'.

p. 283: Supplement the first formula

$$L = \frac{1}{2}\, g_{\mu\nu}(x) \dot{x}^{\,\mu} \dot{x}^{\,\nu}$$

in sec. 11.5.2 by a dot, i.e.

$$L = \frac{1}{2}\, g_{\mu\nu}(x) \dot{x}^{\,\mu} \dot{x}^{\,\nu}.$$

p. 315: The reference to 'chap. 7.3' on this page, and also on the pages 424, 557, 1110, 1121 and 1299 is wrong; it must be replaced by 'chap. 9' on Differential And Integral Calculus For Anticommuting Variables.

p. 318: In the line preceding equation (12.19) replace '... supersymmetric generators ...' by '... supersymmetry generators ...'.

p. 346: The formula (13.17) must read

$$K(v, w) = -\frac{R(v, w, v, w)}{A(v, w)^2}.$$

p. 371: The formula (13.124) must be completed by a final dot.

p. 384: In the beginning of the first paragraph of that page replace
'Let us return to the general situation. We choose for G the retarded and the advanced Green's function, and ...'
by
'Let us return to the general situation. We choose for G the retarded respectively advanced Green's function, and ...'.

p. 387: In the part set in footnote style, the formula

$$L[\psi, \dot{\psi}] = \int d^{\,3}x\, \pi \frac{\delta H[\pi, \psi]}{\delta \psi} - H[\pi, \psi]$$

must be replaced by

$$L[\psi, \dot{\psi}] = \int d^{\,3}x\, \pi \frac{\delta H[\pi, \psi]}{\delta \pi} - H[\pi, \psi]$$

p. 395: In the first line of the third paragraph one must replace '... Dirac (1967) ...' by '... Dirac (1964) ...'.

p. 472: In the figure caption of Fig. 17.1 replace 'polynomial' by 'polygonal'.

p. 515: At the end of that page replace the line

$$J = \left(J^{ik}\right)_{j,k=1,\ldots,d} \qquad J^{-1} = \left(J_{ik}\right)_{j,k=1,\ldots,d}$$

by

$$J = \left(J^{jk}\right)_{j,k=1,\ldots,d} \qquad J^{-1} = \left(J_{jk}\right)_{j,k=1,\ldots,d}$$

p. 555: Replace equation (22.31) by

$$i\frac{d}{dt} z - \omega z \;=\; 0 \qquad\qquad i\frac{d}{dt} \bar{z} + \bar{z}\omega \;=\; 0$$

p. 556: In the last line of that page replace '$d(\bar{z}_{N+1}, dz_{N+1})$' by '$d(\bar{z}_{N+1}, z_{N+1})$'.

p. 589: In the last line of both formula (24.13) and (24.14) one plus sign in '$\cdots + + \frac{1}{2}m^2 \cdots$' must be deleted.

p. 605: In line 11 replace '$c(v)w = c \cdot w$' by '$c(v)w = v \cdot w$'.

p. 625: In the line following equation (25.20) replace '... is reached in that the vacuum graphs are cancelled ...' by '... is reached in that the graphs containing vacuum graphs are cancelled ...'

p. 705: In the second paragraph of section 27.4 omit in 'The purist's approach to the derivation of the Feynman rules would be to introduce external currents J for the gluons, the Grassmann currents $\bar{\eta}$ and η for the quarks and antiquarks, and ...' the underlined "the".

p. 808: In line 6 of sec. 34.7.1 omit the "of" in
'... where the element of $\gamma \in \Gamma$ is assumed ...'.

p. 810: Replace the third line following formula (34.99), which is 'and the energy' by 'and the energies'.

p. 848: In the References the following literature item has to be supplemented:
Knizhnik V. G. and Zamolodchikov A. B., Nucl. Phys. B 247 (1984) 83

p. 906: In the line before formula (18.21) replace '... as follows' by '... as follows:', i.e. add a colon.

p. 954: In line seven omit the underlined 'the' in '... necessary in order to obtain a consistent the time ...'.

p. 1013: In formula (42.98) the last line must read:

$$\exp\left(\frac{i}{\hbar}\sum_{n=0}^{N}\left(-2(u_{n+1}\circ v_n + v_n \circ u_n + u_n \circ u_{n+1}) - \epsilon\frac{1}{2}v_n \circ \Omega_n v_n\right)\right)$$

p. 1026: The third line below formula (42.168) begins with:
'as we have already used earlier. Note ...'.
It is to be replaced by:
'for the harmonic oscillator, as we have already used earlier. Note ...'.

p. 1050: In Theorem 43.1 'Stone-von Neumann' is set in boldface letters; it is to be set in normal font.

p. 1080: The formula (44.67) has to be supplemented by a final dot.

p. 1109: The heading 'WEYL Quantization of Fermions' of the pages 1109,1111,1113,...,1135 must be replaced by 'Weyl Quantization of Fermions'.

p. 1133: The formula (45.151) has to be replaced by

$$= \lim_{N\to\infty} \int \prod_{n=1}^{N} d\xi_n \exp - \sum_{n=0}^{N}\left(\frac{1}{2}\,\xi_n \cdot \xi_{n+1} + H\Big(\frac{\xi_n + \xi_{n+1}}{2}\Big)\right)$$

p. 1134: In the formula on this page the product $\prod_{n=1}^{N}$ must be replaced by $\prod_{n=0}^{N}$.

p. 1204: In the second line following equation (46.324) replace '$\mathrm{ind}\,(i\not{D}^{+}, \sigma^{\pm})$' by '$\mathrm{ind}\,(i\not{D}^{\pm}, \sigma^{\pm})$'.

p. 1236: The first line of section 27.2 ends with '... was given in a a ...'; it is to be replaced by '... was given in a ...', i.e. one 'a' has to be deleted.

p. 1249: In the References the following literature items have to be inserted:
Friedrich T., *Dirac-Operatoren in der Riemannnschen Geometrie*, Vieweg, Braunschweig 1997
Moore J. D., *Lectures on Seiberg-Witten Invariants*, Springer, Berlin 2001
Morgan J. W., *The Seiberg-Witten Equations and Applications to the Topology of Smooth Four-Manifolds*, Princeton University Press, Princeton 1996

p. 1295: In the line following (48.99) replace $\Omega^{\cdot}(A) = \bigoplus_{p\geq 0} \Omega^1(A)$ by $\Omega^{\cdot}(A) = \bigoplus_{p\geq 0} \Omega^p(A)$.

p. 1321: At the end of this page replace the two lines
'multiplication. Moreover, one can introduce a map $TM \otimes \mathcal{S}M \to \mathcal{S}M$ through
Clifford multiplication $X \otimes \psi \mapsto X \cdot \psi$; by means of a local orthonormal repère basis'
by
'multiplication. Moreover, one can introduce a map $V(M) \otimes \mathcal{S}M \to \mathcal{S}M$ through
Clifford multiplication $X \otimes \psi \mapsto X \cdot \psi$, where $X \in V(M)$ denotes a vector field; by means of a local orthonormal repère basis'.

p. 1378: In the last but one line in front of equation (50.50) replace '... unitary equivalent spectral triple (see sec. 49.9)...' by '... unitarily equivalent spectral triple (see sec. 49.9)...'.

p. 1513: In the second line of K. replace '... linear independent ...' by '... linearly independent ...'.

p. I-1: On the first page of the index replace the two entries

accidental degeneracy, 891

accidental degeneracy, 892, 897, 1499

by

accidental degeneracy, 891, 892, 897, 1499