ERRATUM FOR "SASAKIAN GEOMETRY"
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1. Corrections for first printing

(1) page vi (middle): 'Venezuela' should be Valenzuela.
(2) page 159: Theorem 5.2.16: 'dimensional' should be dimension.
(3) page 208: Theorem 7.1.3 (iii): 'Equation (4.3.5)' should be Equation (4.3.2).
(4) page 213: line 15 beginning: 'deformation' should be deformations.
(5) page 214: 6th line of subsection 7.2.1: $\Omega(M)T^{\mathfrak{T}}$ should be $\Omega(M)^{\mathfrak{T}}$.
(6) page 214: second line of proof of Prop. 7.2.1: the second equation should be $\xi \lrcorner d(\xi \lrcorner \alpha) = 0$, that is, the $=0$ is missing.
(7) page 230: 3rd line above Theorem 7.4.4: 'Example 3.5.16' should be Example 8.1.3.
(8) page 232: footnote: 'open sets' should be contractible open sets.
(9) page 240: line 1: 'to a the differential' should be to the differential.
(10) page 262: Top of page, Example 8.1.3 incorrectly states that $\mathrm{cup}(\mathcal{N}^{2n+1}) = 2n$. The correct answer is: $\mathrm{cup}(\mathcal{N}^3) = 2, \mathrm{cup}(\mathcal{N}^5) = 3$, and $\mathrm{cup}(\mathcal{N}^{2n+1}) = 2n - 2$ for $n > 2$.
(11) page 284: line above Lemma 8.4.27: 'arestriction' should be a restriction.
(12) page 329: (ii) at the bottom of the page: insert $\widetilde{SL}(2, \mathbb{R})$ between where and is, and then the word 'the' before universal.
(13) page 344: line 9 from bottom: '$d = 4n + 4$' should be $d = 4n + 2$.
(14) page 390: 6th line from the bottom: 'Appendix B.2' should be Appendix B.3.
(15) page 402: In (iii) of Question 11.4.1, Corollary 11.4.13 should be 11.4.14.
(16) page 410: 2nd line above Prop. 11.7.3: ref '[BF00b]' should be [BG00b].
(17) page 412: above 11.7.8 the reference should be [BGO07] not [BG006].

2. Corrections for both the first and second printings

(1) page 10: The horizontal maps in diagram 1.1.1 should be f_U and f_V, respectively, not h_U, h_V.
(2) page 17: In the first line Proposition 1.2.2 should be Theorem 1.2.2.
(3) page 18: In line 4 Proposition 1.2.2 should be Proposition 1.2.4.
(4) page 80: On line 13 $|\mathbf{z}|^2 = |z_1|^2 + \cdots + \widehat{|z_i|^2} + \cdots + |z_n|^2$, should be $|\mathbf{z}|^2 = |z_0|^2 + \cdots + \widehat{|z_i|^2} + \cdots + |z_n|^2$,. At the end of the 6th line of Example 3.3.13 the last α_p should be α_{p+q} and at the end of the last line of the page $\binom{p+1}{p}$ should be $\binom{p+q}{p}$.
(5) page 89: The last term in the decomposition in Theorem 3.3.2 should be $\bar{\partial}^*(\Gamma(\Lambda^{k+1,l}M))$.
(6) page 94: In the second line of Theorem 3.4.9 delete the second 'there'.

(7) page 96: In lines 6,7, and 9 from the bottom, Iataka should be Iitaka.

(8) page 98: In (iii) of Example 3.5.11 $Q'\mathbb{CP}^3$ should be $Q' \subset \mathbb{CP}^3$

(9) page 100: In the first line of Section 3.5.2 'equivalent way...' should be equivalent ways...

(10) page 102: In line 7 Iataka should be Iitaka.

(11) page 128: In the sentence after Equation 4.4.3, 'dimension Iataka' should be Iataka dimension.

(12) page 146: In the second line of Theorem 4.7.5 the $(\mathcal{X}, \Delta)$ after Conversely, if should be (X, Δ).

(13) page 147: In the line before formula (4.7.1), replace 'Plc(X)' with 'Pic(X)'.

(14) page 149: In the third line of Corollary 4.7.15'denoted' should be denote.

(15) page 169: In lines 13,17 and 19 replace the 'e_i' by r_i. There are four all together.

(16) page 172: In the last line of Theorem 5.4.16 it should be Tables B.3.1 and B.3.2.

(17) page 173: In the fifth line from the bottom, remove 'the' before Reid's, and replace 'Chelstov' by Cheltsov.

(18) page 177: In the first sentence of Theorem 5.5.7 '$I = |\mathbf{w}| - d < 0$.' should be $I = |\mathbf{w}| - d$.

(19) page 180: In the first line the word 'mute' should be moot.

(20) page 188: line 11 should be 'that on a compact manifold the flow ...'

(21) page 188: In the second line of Remark 6.1.4: 'It is quite clear the...' should be It is quite clear that....

(22) page 196: The second line of Lemma 6.3.4 'if and only' should be if and only if.

(23) page 210: Remove the word 'is' just above the formula for I and in the line below the formula replace 'extends' by extending.

(24) page 214: line 12: 'the leaves characteristic' should be the leaves of the characteristic.

(25) page 214: In the second line of Exercise 7.2, $\mathcal{S}\mathbf{w}$ should be $\mathcal{S}_{\mathbf{w}}$.

(26) page 214: In the sixth line of subsection 7.2.1 it should be $\Omega(M)^{\mathfrak{T}}$ and in the second line of the proof of Proposition 7.2.1 it should be $\xi \lrcorner d(\xi \lrcorner \alpha) = 0$.

(27) page 218: The line above Theorem 7.2.9 should not be separated from the previous line.

(28) page 229: line 19: The reference [Tan69a] should be [Tan69b].

(29) page 234: line 21 from bottom: period after M should be a comma.

(30) page 235: line 16: $\mathfrak{G}(\mathbb{R})/\mathfrak{G}(\mathbb{Z})$ should be $\mathfrak{G}_5(\mathbb{R})/\mathfrak{G}_5(\mathbb{Z})$.

(31) page 235: line 22: The word 'extend' should be extent.

(32) page 245: In the last sentence of Definition 7.5.24 $c_1^{orb}(\mathcal{Z})$ should be $c_1(\mathcal{F}_\xi)$.

(33) page 258: line 14: the term $d\eta(\Phi f_* X, f_* Y)$ at the end of the line is repeated; hence, it should be deleted.

(34) page 266: line 4: $\Gamma_{\mathfrak{Autut}(I)}$ should be $\Gamma_{\mathfrak{Aut}(I)}$.

(35) page 268: In the 6th line and the 14th line below Corollary 8.2.8 'comes' should be come. Also in the 13th line below Corollary 8.2.8 'the all' should be all the.

(36) page 270: In Proposition 8.2.12 we assume that M is compact.

(37) page 276: In Definition 8.4.6, the second line 'of $G^{\mathbb{C}}$-orbit' should be of the $G^{\mathbb{C}}$-orbit...

(38) page 278: In Theorem 8.4.4 the last line 'perfect Morse function' should be perfect Morse-Bott function, and in the second line of Definition 8.4.6 'of $G^{\mathbb{C}}$-orbit...' should be of the $G^{\mathbb{C}}$-orbit.

(39) page 279: In the third line, 'startum' should be stratum, and in the first line of Theorem 8.4.10, the symbol $\in$ should be $\subset$.

(40) page 283: In Proposition 8.4.23 '$\mathfrak{Con}(M, \eta)$' and '$\mathfrak{con}(M, \eta)$' should be $\mathfrak{Con}(M, \mathcal{D})$ and $\mathfrak{con}(M, \mathcal{D})$, respectively. Also remove the superscript ξ from $C^{\infty}(M)^{\xi}$ as well as the last sentence 'Furthermore, ξ is in the center of $\mathfrak{con}(M, \eta)$.'

(41) page 284: In the first line above Lemma 8.4.27, 'arestriction' should be a restriction.

(42) page 287: In the second equation of Definition 8.4.36, $z_j \in \mathbb{R}$ should be $a_j \in \mathbb{R}$.

(43) page 288: In the eleventh line from the bottom '2^{n+1}-tant' should be $n+1$-tant.

(44) page 294: In the third line of the proof of Theorem 8.5.6 remove 'is,' after i.e.

(45) page 311: At the end of Example 9.3.20, the theorem reference should be Theorem 11.1.13 not 11.4.1.

(46) page 241: In the third line after the first $=$ a prime is missing. It should be $\frac{1}{n'!} \eta' \wedge (d\eta')^n$.

(47) page 349: last row and last column of the table, the 'k' should be m.

(48) page 351: The concluding sentence in Proposition 10.2.27 should be: Then $M = k(S^2 \times S^3)$ or $X_{\infty} \# k(S^2 \times S^3)$ for some non-negative integer k (again $k = 0$ means S^5).

(49) page 353: In the second line from the bottom of page, 'was given' should be were given.

(50) page 356: The table: (1) The second to the last row of the table is incorrect as stated. The vector **a** should be $(4, 4, 3, 3)$ in which case all entries are correct. However, in any case it is a perturbation of a BP type, and should be removed from the table. (2) In the forth to the last row, the weight vector should be $(4, 4, 5, 8)$ not $(4, 4, 8, 5)$.

(51) page 361: line 23, $S^1 \#_f S_2$ should be $S_1 \#_f S_2$.

(52) page 363: In line 20 remove the word 'line'.

(53) page 365: The last sentence in Theorem 10.4.12 should read: Thus, with the exception of S^5, every regular contact 5-manifold admits toric regular indefinite Sasakian structures. The phrase 'with the exception of S^5,' is missing.

(54) page 367: In Theorem 10.4.14 $\lceil \frac{a_2}{a_1} \rceil$ (which occurs twice) should be $\lceil \frac{a_1}{a_2} \rceil$.

(55) In Theorem 10.4.14 $\lceil \frac{a_2}{a_1} \rceil$ (which occurs twice) should be $\lceil \frac{a_1}{a_2} \rceil$.

(56) page 386: In the third line of Section 11.3.3 the reference to Lichnerowicz [Lic57] is incorrect. The correct reference is: A. Lichnerowicz, Théorie globale des connexions et des groupes d'holonomie. (French) Edizioni Cremonese, Roma, 1957.

(57) page 389: In the sixth line of Theorem 11.4.1 the l should be k.

(58) page 390: In the sixth line from the bottom, 'Appendix B.2' should be 'Appendix B.3'.

(59) page 391: In the second line of subsection 11.4.2 add 'in dimension five' between that and toric.
(60) page 392: Penultimate line: Sasaki-Einstein should be Kähler-Einstein.
(61) page 399: In the second line of Theorem 11.4.12 there should be a comma between $m \neq 30k$ and $m \geq 12$.
(62) page 401: Delete the '(i)' after the phrase 'Theorem 10.2.25' first in the statement of Theorem 11.4.13 (i), and then in the first line of the proof.
(63) page 402: In the table, in row 11, the first column should be: M_m, $m > 2$, $m \neq 30l$, and the second column should be $m > 2$, $m \neq 30l$. That is, in both columns the $m \neq 30l$ is missing.
(64) page 402: In (iii) of Question 11.4.1, there are 37 missing cases, not 31.
(65) page 403: line 17, 'exotic sphere which...' should be exotic spheres which...
(66) page 405: line 3, 'can shows' should be 'can show'
(67) page 407: In the first line of Definition 11.6.1 '$\pi_1^{orb} = 0\{e\}$' should be $\pi_1^{orb} = \{e\}$.
(68) page 408: In line 8 after the first equal sign it should be $c_1(\mathcal{Z}_1) + c_1(\mathcal{Z}_2)$.
(69) page 414: In the eighth line of Example 11.7.9 '$|H_2(M_k^7, \mathbb{Z})| = k^{21}$' should be $|H_3(M_k^7, \mathbb{Z})| = k^{21}$, and '$|H_2(M_k^9, \mathbb{Z})| = k^{204}$' should be $|H_4(M_k^9, \mathbb{Z})| = k^{204}$.
(70) page 416: In the third line of Example 11.7.14 '$L^*(355, 631, 5279, 12528; 37584)$ and $L^*(407, 547, 5311, 12528; 37584)$' and should be $L^*(355, 631, 5279, 12528, 18792; 37584)$ and $L^*(407, 547, 5311, 12528, 18792; 37584)$, respectively.
(71) page 419: In Theorem 11.8.4 the 'Phi' should be Φ.
(72) page 420: In the beginning of the 3rd line of Definition 11.8.10 'is if' should be 'is Sasakian if' ...
(73) page 430: In the matrix (12.2.10) the entries should be α_{12}, etc., not a_{12}.
(74) page 435: In Lemma 12.3.4 M^{4n+3} should be M^{4n}, and the line below the lemma $c_1(M)$ should be $c_1(\mathcal{Z}(M))$.
(75) page 436: The case $n = 3$ of Theorem 12.3.8 is actually still open as there is a gap in the proof in [HeHe02a,HeHe02b].
(76) page 543: In the first line of Theorem 14.4.2, 'be a an Einstein ...' should be 'be an Einstein ...'
(77) page 562: In line 7 with weight vector $(3, 3, 5, 5)$, b_2 should be 8 not 5.
(78) page 565: In Table B.4.2 the link $L(2, 3, 6, 8)$ on $2M_\infty \# M_2$ should be $L(2, 3, 4, 6)$ which is included in the series case.
(79) page 610: In index, 5th line from the bottom, Iataka should be Iitaka.
(80) page 612: In index, line 34 put 242 after Sasaki-Seifert structure.
(81) page 613: In index, the eighth line from the bottom 'stransverse' should be transverse.

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