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Erratum

Erratum to "A gap theorem for complete constant scalar curvature hypersurfaces in the de Sitter space" [J. Geom. Phys. 37 (2001) 237–250][☆]

Aldir Brasil Jr.[a], A. Gervasio Colares[a], Oscar Palmas[b,*]

[a] *Departamento de Matemática, Universidade Federal do Ceará, CEP 60.455-760, Fortaleza CE, Brazil*
[b] *Departamento de Matemáticas, Facultad de Ciencias, UNAM, México 04510 DF, México*

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The major part of these errata come from the fact of writing $R-1$ instead of $1-R$. We must point out that all of our results, as well as the proofs, remain valid.

(1) Line 3 in Abstract. *Says* $(R-1)$; *must be* $(1-R)$.
(2) Page 238, line 12. *Says* $R>1$; *must be* $(n-2)/n \le R \le 1$.
(3) Page 238, line 18. *Says* $R>1$; *must be* $(n-2)/n < R < 1$.
(4) Page 238, line 19. *Says* $\bar{R}=R-1$; *must be* $\bar{R}=1-R$.
(5) Page 238, line 23. *Says* with constant normalized scalar curvature R and $\bar{R}=R-1>0$; *must be* with constant normalized scalar curvature R, $(n-2)/n < R < 1$ and $\bar{R}=1-R$.
(6) Page 239, line 6. *Says* $R=\bar{R}+1$; *must be* $\bar{R}=1-R$.
(7) Page 239. In Fig. 1, the symbol Ø in the upper right *must be* deleted.
(8) Page 240, line 18. *Says* $R=\bar{R}+1$; *must be* $\bar{R}=1-R$.
(9) Page 240, line 21. *Says* $\bar{R}=\sum_{i\neq j} k_i k_j$; *must be* $n(n-1)\bar{R}=\sum_{i\neq j} k_i k_j$.
(10) Page 241, line 12. *Says* $R=1+(1/n)(2+(n-2)\tanh^2 r)$; *must be* $R=1-(1/n)(2+(n-2)\tanh^2 r)$.
(11) Page 241, line 17. *Says* $R=1+(1/n)(2+(n-2)\coth^2 r)$; *must be* $R=1-(1/n)(2+(n-2)\coth^2 r)$.
(12) Page 242, line 5. *Says* see [17]; *must be* see [20].
(13) Page 243, line 11. *Says* $\bar{R}=R-1$; *must be* $\bar{R}=1-R$.
(14) Page 243, line 12. *Says* $+4(n-1)\bar{R}+n$; *must be* $-4(n-1)\bar{R}+n$.
(15) Page 244, line 5. *Says* since $\bar{R}$ is constant and positive, Lemma 4.1 of [2] implies; *must be* since $\bar{R}=1-R$ is constant and positive, the proof of Corollary 4.2 in [11] implies.
(16) Page 244, line 19. *Says* $+4(n-1)\bar{R}+n$; *must be* $-4(n-1)\bar{R}+n$.
(17) Page 244, next-to-last line. *Says* $(nH-nh_{ii})$; *must be* $(nH-h_{ii})$.

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* Corresponding author. Tel.: +52 55 56224868; fax: +52 55 56224869.
E-mail addresses: aldir@mat.ufc.br (A. Brasil Jr.), gcolares@mat.ufc.br (A. Gervasio Colares), opv@hp.fciencias.unam.mx (O. Palmas).

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(18) Page 244, last line. *Says*

$$= n\sum_i H(nH)_{ii} - n\sum_i k_i(nH)_{ii} \leq n(\sup|H| - C)\Delta(nH)$$

must be

$$= n\sum_i H(nH)_{ii} - \sum_i k_i(nH)_{ii} \leq (n\sup|H| - C)\Delta(nH).$$

(19) Page 245, lines 1 and 2. *Says* $C = \min k_i$ the minimum; *must be* $C = \inf k_i$ the infimum.
(20) Page 244, line 4. *Says* $n(\sup|H| - C)$; *must be* $(n\sup|H| - C)$.
(21) Page 244, last line. *Says* $n(\sup|H| - C)$ twice; *must be* $(n\sup|H| - C)$.
(22) Page 246, line 7. *Says* $+4(n-1)\bar{R} + n$; *must be* $-4(n-1)\bar{R} + n$.
(23) Page 246, line 12. *Says* $L_1(n\sup H)$; *must be* $L_1(n\sup|H|)$.
(24) Page 248, line 6. *Says* $G(y_2, y_2') = y_2^{n-2}(y_2'^2 + y_2^2 - 1 - \bar{R}y_2^2)$; *must be* $G(y_2, y_2') = y_2^{n-2}(y_2'^2 + y_2^2 - \delta - \bar{R}y_2^2)$.
(25) Page 248, lines 13–15. *Says* correspond exactly to the hyperbolic cylinders $H^1(1-\coth^2 r) \times S^{n-1}(1-\tanh^2 r)$ with principal curvatures $k_i = \tanh r$ and $k_n = \coth r$; *must be* correspond exactly to the hyperbolic cylinders.
(26) Page 249, lines 8 and 9. *Says*

$$\frac{y_2'' + y_2^2}{\sqrt{y_2'^2 + y_2^2 - \delta}} = \frac{y_2}{2\sqrt{y_2'^2 + y_2^2 - \delta}}\left(n\bar{R} - (n-2)\frac{y_2'^2 + y_2^2 - \delta}{y_2^2}\right)$$
$$= \frac{n\bar{R}}{2}\frac{y_2}{\sqrt{y_2'^2 + y_2^2 - \delta}} - (n-2)\frac{\sqrt{y_2'^2 + y_2^2 - \delta}}{y_2};$$

must be

$$\frac{y_2'' + y_2}{\sqrt{y_2'^2 + y_2^2 - \delta}} = \frac{y_2}{2\sqrt{y_2'^2 + y_2^2 - \delta}}\left(n\bar{R} - (n-2)\frac{y_2'^2 + y_2^2 - \delta}{y_2^2}\right)$$
$$= \frac{1}{2}\left(n\bar{R}\frac{y_2}{2\sqrt{y_2'^2 + y_2^2 - \delta}} - (n-2)\frac{\sqrt{y_2'^2 + y_2^2 - \delta}}{y_2}\right).$$