



## Correction: Towards integrable perturbation of 2d CFT on de Sitter space

Christian D. Jäkel<sup>1</sup> · Yoh Tanimoto<sup>2</sup>

Published online: 11 October 2023  
© The Author(s) 2023

**Correction: Letters in Mathematical Physics (2023) 113:89**  
<https://doi.org/10.1007/s11005-023-01709-4>

The publication of this article unfortunately contained mistakes. There were errors in some equations. The corrected equations, which are in the proof of Proposition 6.2 and at the end of Section 6, respectively, are given below.

$$\begin{aligned} & \left[ \hat{L}_m \otimes \mathbb{1} - \mathbb{1} \otimes \hat{L}_{-m} + i\lambda m \sum_{k \in \mathbb{R}, \epsilon = \pm 1} Y_{\epsilon\alpha, k} \otimes Y_{\epsilon\alpha, -m+k}, \right. \\ & \quad \left. \hat{L}_n \otimes \mathbb{1} - \mathbb{1} \otimes \hat{L}_{-n} + i\lambda n \sum_{k \in \mathbb{R}, \epsilon = \pm 1} Y_{\epsilon\alpha, k} \otimes Y_{\epsilon\alpha, -n+k} \right] \\ &= (m-n)\hat{L}_{m+n} \otimes \mathbb{1} + (-m+n)\mathbb{1} \otimes \hat{L}_{-m-n} \\ & \quad + i\lambda \sum_{k \in \mathbb{R}, \epsilon = \pm 1} \left( n((2d-1)m-n) - m((2d-1)n-m) \right) Y_{\epsilon\alpha, k} \otimes Y_{\epsilon\alpha, -m-n+k} \\ &= (m-n) \left( \hat{L}_{m+n} \otimes \mathbb{1} - \mathbb{1} \otimes \hat{L}_{-m-n} + i\lambda(m+n) \sum_{k \in \mathbb{R}, \epsilon = \pm 1} Y_{\epsilon\alpha, k} \otimes Y_{\epsilon\alpha, -m-n+k} \right). \end{aligned}$$

---

The original article can be found online at <https://doi.org/10.1007/s11005-023-01709-4>.

---

✉ Yoh Tanimoto  
hojt@mat.uniroma2.it  
Christian D. Jäkel  
jaekel@ime.usp.br

<sup>1</sup> Department of Applied Mathematics, University of São Paulo (USP), Rua de Matão 1010, São Paulo CEP 05508-090, Brazil

<sup>2</sup> Dipartimento di Matematica, Università di Roma Tor Vergata, Via della Ricerca Scientifica 1, 00133 Rome, Italy

$$\begin{aligned}
& \left[ \hat{L}_m \otimes \mathbb{1} - \mathbb{1} \otimes \hat{L}_{-m} + \lambda \sum_{k \in \mathbb{R}, \epsilon = \pm 1} Y_{\epsilon\alpha, k} \otimes Y_{\epsilon\alpha, -m+k}, \right. \\
& \left. \hat{L}_n \otimes \mathbb{1} - \mathbb{1} \otimes \hat{L}_{-n} + \lambda \sum_{k \in \mathbb{R}, \epsilon = \pm 1} Y_{\epsilon\alpha, k} \otimes Y_{\epsilon\alpha, -n+k} \right] \\
&= (m-n)\hat{L}_{m+n} \otimes \mathbb{1} + (-m+n)\mathbb{1} \otimes \hat{L}_{-m-n} \\
&+ \lambda \sum_{k \in \mathbb{R}, \epsilon = \pm 1} \left( ((2d-1)m-n) - ((2d-1)n-m) \right) Y_{\epsilon\alpha, k} \otimes Y_{\epsilon\alpha, -m-n+k} \\
&= (m-n) \left( \hat{L}_{m+n} \otimes \mathbb{1} - \mathbb{1} \otimes \hat{L}_{-m-n} + 2d\lambda \sum_{k \in \mathbb{R}, \epsilon = \pm 1} Y_{\epsilon\alpha, k} \otimes Y_{\epsilon\alpha, -m-n+k} \right).
\end{aligned}$$

The original article has been corrected.

**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.