



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

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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>.

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

The original article has been corrected.

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