

Errata: String Field Theory – A Modern Introduction

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January 31, 2024

This document collects errata for my book [1]. References (equations, etc.) are given with respect to the published version (page numbers refer to the online draft of the corresponding edition). Each entry is accompanied by the date where it has been added to help find the most recent corrections. If you find any additional typos, please let me know. The latest version of these errata can be found at:

<https://harolderbin.com/science-books/>

You can also find the most recent draft of my book, together with a frozen draft version of the book for easy reference.

1. p. 68, eq. (3.48):

$$S_{\text{gh}}[g, \hat{g}, B] \longrightarrow S_{\text{gf}}[g, \hat{g}, B]$$

(18/03/2022)

2. p. 91, remark 6.6:

"Operators with $h = \hbar = 0$ "

→ " $h = \bar{h} = 0$ "

(29/12/2023)

3. p. 111, eq. (7.44):

$$J(z)V_k(w, \bar{w}) \sim \frac{\ell^2 k}{2} \frac{V_k(w, \bar{w})}{z-w} \longrightarrow J(z)V_k(w, \bar{w}) \sim \frac{k}{2} \frac{V_k(w, \bar{w})}{z-w}$$

(31/01/2023)

4. p. 134, sec. 8.1:

"matter: central charge c_m , energy-momentum tensor T_m and Hilbert space

\mathcal{H}_m "

→ " T^m "

(31/01/2024)

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5. p. 158, eq. (10.34):

$$b_0 |\Phi\rangle = b_0 [Q_B, \Delta] \longrightarrow b_0 |\Phi\rangle = b_0 \{Q_B, \Delta\}$$

(02/10/2022)

6. p. 165, before eq. (10.88):

$$k^2 A_\mu - k_\mu k \cdot A_\nu(k) = 0 \longrightarrow k^2 A_\mu - k_\mu k \cdot A(k) = 0$$

(18/03/2022, thanks to Maxime Médevielle)

7. p. 169, before eq. (10.116):

"The equation of motion is to the on-shell condition as expected"

→ "The equation of motion is **equivalent** to the on-shell condition as expected"

(18/03/2022, thanks to Maxime Médevielle)

8. p. 294, eq. (C.121-122):

$$e^{W_\Psi[\psi^r]} \longrightarrow e^{-W_\Psi[\psi^r]}$$

(18/03/2022)

References

- [1] H. Erbin. *String Field Theory: A Modern Introduction*. Lecture Notes in Physics. Springer, Mar. 2021. DOI: [10.1007/978-3-030-65321-7](https://doi.org/10.1007/978-3-030-65321-7). arXiv: [2301.01686](https://arxiv.org/abs/2301.01686).