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Erratum

Erratum to: Integrable QFT and Longo–Witten Endomorphisms

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In the original publication of the article, the authors had introduced left–right S-matrices. One of their defining properties should be corrected as follows.

On page 580, Definition 3.4(4), the right mixed Yang–Baxter equation (YBE) should be

$$R_{23}^- S_{12} S_{13} = S_{13} S_{12} R_{23}^-.$$

Accordingly, on page 581, Proposition 3.5(3), the claim should be

$$\underline{R}^-(q-q')_{23} \cdot \underline{S}(q)_{12} \cdot \underline{S}(q')_{13} = \underline{S}(q')_{13} \cdot \underline{S}(q)_{12} \cdot \underline{R}^-(q-q')_{23},$$

i.e. $\displaystyle\sum_{\alpha'\beta'\gamma'} \underline{R}^{-\,\beta\gamma}_{\ \ \beta'\gamma'}(q-q') \underline{S}^{\alpha\beta'}_{\alpha'\beta''}(q) \underline{S}^{\alpha'\gamma'}_{\alpha''\gamma''}(q') = \sum_{\alpha'\beta'\gamma'} \underline{S}^{\alpha\gamma}_{\alpha'\gamma'}(q') \underline{S}^{\alpha'\beta}_{\alpha''\beta'}(q) \underline{R}^{-\,\beta'\gamma'}_{\ \ \beta''\gamma''}(q-q').$

All other results remain unchanged. Yet, in order to obtain the right mixed YBE in Proposition 3.6, one needs to use the flip symmetry. In Lemma 3.16, the proof of the second equivalence is valid only with this corrected definition. One should rewrite $S^{(m,n)}$ as follows:

$$S^{(m,n)} = S_{1|1} S_{1|2} \cdots\cdots S_{1|n} S_{2|1} \cdots S_{m|n},$$

by exchanging the orders of factors which are acting on different tensor components. With this expression, one proves from the right mixed YBE that $\mathbb{1}_{\mathcal{H}_+^{\otimes m}} \otimes P_{R^-}^{(n)}$ commutes with $S^{(m,n)}$ for $m \geq 1, n \geq 2$.

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Birkhäuser

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