Breathers in the elliptic sine-Gordon model

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## Erratum

## Breathers in the elliptic sine-Gordon model

O A Castro-Alvaredo and A Fring 2003 J. Phys. A: Math. Gen. 36 10233-10249
Due to a mishap during the printing process, some copies of issue 40 have dark areas on page 10242. This may have rendered the following section illegible.

$$
\begin{array}{ll}
b_{13} c_{23}+(-1)^{n} c_{13} a_{23}=0 \quad \text { for } \quad \theta_{21}^{n}=i\left(\pi-2 n v K_{\ell}\right) \\
d_{13} b_{23}+(-1)^{n} a_{13} d_{23}=0 \quad \text { for } \quad \theta_{21}^{n}=\mathrm{i}\left(\pi-2 n \nu K_{\ell}\right) \\
b_{13} a_{23}+(-1)^{n} c_{13} c_{23}=a_{13} b_{23}+(-1)^{n} d_{13} d_{23} \quad \text { for } \quad \theta_{21}^{n}=\mathrm{i}\left(\pi-2 n \nu K_{\ell}\right) . \tag{5.6}
\end{array}
$$

Therefore the braiding relation (5.3) reduces to a diagonal scattering process, i.e. there is no backscattering amplitude. We obtain after some algebra

$$
\begin{equation*}
Z_{n}\left(\theta_{0}\right) Z\left(\theta_{3}\right)=S_{b_{n} s}(\theta) Z\left(\theta_{3}\right) Z_{n}\left(\theta_{0}\right) \tag{5.7}
\end{equation*}
$$

with

$$
\begin{align*}
S_{b_{n} s}(\theta) & =a_{13} b_{23}+(-1)^{n} d_{13} d_{23}  \tag{5.8}\\
& =\frac{\operatorname{sn}\left(i \theta / v-\pi / 2 v+n K_{\ell}\right)}{\operatorname{sn}\left(i \theta / v+\pi / 2 v+n K_{\ell}\right)}\left[\ell \operatorname{sn}^{2} \frac{\pi}{v} \operatorname{sn}^{2}\left(\frac{\mathrm{i} \theta}{v}+\frac{\pi}{2 v}+n K_{\ell}\right)-1\right] a_{13} a_{23} \tag{5.9}
\end{align*}
$$

