Geometrical approach to scattering in one dimension

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## Corrigendum

## Geometrical approach to scattering in one dimension

D W L Sprung, G V Morozov and J Martorell 2004 J. Phys. A: Math. Gen. 37 1861-1880

Equation (4) as printed is correct for the case of a reflection symmetric cell. For a general cell it should say only

$$
\begin{equation*}
\omega=\frac{r / t+z / t^{*}}{1 / t+z r^{*} / t^{*}} \tag{4}
\end{equation*}
$$

The third line below should end saying " $\ldots$ with $-r t^{*} / t$ becoming the origin, ...".
The authors regret that equations (7) and (12) were printed incorrectly. They should read

$$
\begin{align*}
M U & =U e^{-i \phi \sigma_{z}}, \quad \text { where } \\
U & =\left(\begin{array}{cr}
e^{-i \chi / 2} \cosh \mu / 2 & e^{-i \chi / 2} \sinh \mu / 2 \\
e^{i \chi / 2} \sinh \mu / 2 & e^{i \chi / 2} \cosh \mu / 2
\end{array}\right)  \tag{7}\\
\cos \phi & =\frac{\sin (k d+\beta)}{\sin \beta} ; \\
r=-\frac{1}{1-i / \alpha} e^{i k d} & =-\frac{1+i \tan \beta}{1+\tan ^{2} \beta} e^{i k d}=-\frac{\alpha}{\sqrt{1+\alpha^{2}}} e^{i(k d+\beta)}=-\cos \beta e^{i(k d+\beta)} \tag{12}
\end{align*}
$$

