

Home Search Collections Journals About Contact us My IOPscience

Geometrical approach to scattering in one dimension

This article has been downloaded from IOPscience. Please scroll down to see the full text article.

2007 J. Phys. A: Math. Theor. 40 6011

(http://iopscience.iop.org/1751-8121/40/22/C01)

View the table of contents for this issue, or go to the journal homepage for more

Download details: IP Address: 171.66.16.109 The article was downloaded on 03/06/2010 at 05:13

Please note that terms and conditions apply.

## 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

$$\omega = \frac{r/t + z/t^*}{1/t + zr^*/t^*} \,. \tag{4}$$

The third line below should end saying "... with  $-rt^*/t$  becoming the origin, ...".

The authors regret that equations (7) and (12) were printed incorrectly. They should read

$$MU = U \ e^{-i\phi\sigma_z}, \qquad \text{where}$$

$$U = \begin{pmatrix} e^{-i\chi/2} \cosh \mu/2 & e^{-i\chi/2} \sinh \mu/2 \\ e^{i\chi/2} \sinh \mu/2 & e^{i\chi/2} \cosh \mu/2 \end{pmatrix}$$
(7)

$$\cos\phi = \frac{\sin(kd+\beta)}{\sin\beta};$$
  
$$r = -\frac{1}{1-i/\alpha}e^{ikd} = -\frac{1+i\tan\beta}{1+\tan^2\beta}e^{ikd} = -\frac{\alpha}{\sqrt{1+\alpha^2}}e^{i(kd+\beta)} = -\cos\beta \ e^{i(kd+\beta)}.$$
 (12)