Non-linear wave equations in a curved background space

1978 J. Phys. A: Math. Gen. 11 2131

(http://iopscience.iop.org/0305-4470/11/10/528)

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Corrigenda

A new expression for harmonic oscillator brackets

Dobeš J 1977 *J. Phys. A: Math. Gen.* **10** 2053–9

Equation (6) should read as follows

$$\langle nlNL;\lambda\,|n_1l_1n_2l_2;\lambda\rangle_D=\frac{\sqrt{\pi}}{(1+D)^{2l}}\sum_{m=0}^{l}Q_mT_m.$$

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Radmore P M and Stephenson G 1978 *J. Phys. A: Math. Gen.* **11** L149–52

On p L150, equations (14), (15) and (16) should read as follows:

$$\frac{E_\alpha}{4\pi}=\int_{\alpha r_+}^{\infty}(r^2-2m\alpha r+e^2\alpha^2)\frac{1}{\alpha}\left(\frac{\mathrm{d}\Phi}{\mathrm{d}r}\right)^2\mathrm{d}r+\int_{\alpha r_+}^{\infty}f(\Phi)\frac{r^2}{\alpha^3}\,\mathrm{d}r. \tag{14}$$

$$\frac{1}{4\pi}\frac{\mathrm{d}E_\alpha}{\mathrm{d}\alpha}=\int_{\alpha r_+}^{\infty}(-2mr+2e^2\alpha)\frac{1}{\alpha}\left(\frac{\mathrm{d}\Phi}{\mathrm{d}r}\right)^2\mathrm{d}r+\int_{\alpha r_+}^{\infty}(r^2-2m\alpha r+e^2\alpha^2)\left(-\frac{1}{\alpha^2}\right)\left(\frac{\mathrm{d}\Phi}{\mathrm{d}r}\right)^2\mathrm{d}r$$
$$+\int_{\alpha r_+}^{\infty}f(\Phi)\left(-\frac{3r^2}{\alpha^4}\right)\mathrm{d}r-\frac{r_+^3}{\alpha}f(\Phi)\Big|_{r=\alpha r_+} \tag{15}$$

$$\frac{1}{4\pi}\frac{\mathrm{d}E_\alpha}{\mathrm{d}\alpha}\Big|_{\alpha=1}=-I_1-3I_2+I_3-r_+^3f(\Phi)\Big|_{r=r_+} \tag{16}$$