Quantised fields over de Sitter space

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Corrigenda

Quantised fields over de Sitter space

Grensing G 1977 *J. Phys. A*: *Math. Gen.* **10** 1687–719

On p 1688 formula (2.4) should read

$$g^{\dagger}Eg = E \qquad g^{\mathrm{T}}E'g = E', \tag{2.4}$$

and on p 1708 formula (9.11) should read

$$\Delta^{-}(z_1, z_2) = \tfrac{1}{2}\mathrm{i}(2\pi)^{-\frac{1}{2}d}\Gamma(\tfrac{1}{2}(d-1)+\mathrm{i}\rho)\Gamma(\tfrac{1}{2}(d-1)-\mathrm{i}\rho) \times[(p_{12})^2-1]^{-\frac{1}{4}(d-2)}P^{-\frac{1}{2}(d-2)}_{-\frac{1}{2}+\mathrm{i}\rho}(-p_{12}(\epsilon)). \tag{9.11}$$

Furthermore, formula (11.16) on p 1713 should be replaced by

$$-2\lambda_{\mathrm{R}} = -2\lambda + \frac{1}{2}\left(\frac{m^2}{4\pi}\right)^{\omega}\frac{J_0(\omega)}{\omega}$$

$$-2\omega(2\omega-1)(16\pi G_{\mathrm{R}})^{-1} = -2\omega(\omega-1)(16\pi G)^{-1} + \frac{1}{2m^2}\left(\frac{m^2}{4\pi}\right)^{\omega}\frac{J_1(\omega)}{\omega-1}, \tag{11.16}$$

and on p 1717 formula (A.29) by

$$\tilde{\rho}_{\mathrm{I}}(\mathring{g}) = \mathring{g} = \tilde{\rho}'_{\mathrm{PT}}(\mathring{g}), \qquad \tilde{\rho}'_{\mathrm{P}}(\mathring{g}) = \mathring{g}^{\dagger-1} = \tilde{\rho}'_{\mathrm{T}}(\mathring{g}). \tag{A.29}$$

On the relation between charge and topology

Sorking R 1977 *J. Phys. A*: *Math. Gen.* **10** 717–25

The third sentence of the second footnote on page 722 should be deleted. Since in § 4 $\mathscr{F}^{\mu\nu}$ is being treated as *axial*, the induced H-tensor $\mathbb{E}$ is well defined (as an axial vector density) *independently* of any external orientation for H. (*Proof.* It is the H-dual of the pullback to H of the M-dual of $\mathscr{F}^{\mu\nu}$.) It is only for polar $\mathscr{F}^{\mu\nu}$ that $\mathbb{E}$ is what one might call 'externally axial'.