

Errata

RELATIVISTIC CORRECTIONS TO THE LAGRANGIAN FOR INTERACTING CHARGED PARTICLES, Demetrios D. Dionysiou, International Journal of Theoretical Physics, 20, 1 (1981)

On p. 9, the function X should be supplied with a minus sign. This changes the second signs of equations (2.31) and (2.32). Also, in equations (2.35) and (2.37) the square brackets should read

$$\left[2R^2\bar{v}_j - R\bar{n}(\bar{R} \cdot \bar{v}_j) \right] \text{ or } R^2 \left[2\bar{v}_j - \bar{n}(\bar{n} \cdot \bar{v}_j) \right]$$

RELATIVITY AND QUANTUM MECHANICS, Hüseyin Yilmaz, International Journal of Theoretical Physics, 21, 871 (1982)

In a recent communication it was implied that if $D_\alpha K_{\mu\nu}^\alpha = 0$, $K_{\mu\nu}^\alpha = -K_{\nu\mu}^\alpha$ then $M_{\mu\nu} = \int (-g)^{1/2} \kappa_{\mu\nu}^\alpha dV_\alpha$ would be conserved. This turns out to be a special case. The general form is $M_{\mu\nu} = \int (-g)^{1/2} \kappa_{\mu\nu}^\alpha dV_\alpha$, where

$$K_{\mu\nu}^\alpha = \kappa_{\mu\nu}^\alpha + \eta_{\mu\nu}^\alpha \\ - \Gamma_{\alpha\mu}^\nu \kappa_{\lambda\nu}^\alpha + \Gamma_{\alpha\nu}^\lambda \kappa_{\lambda\mu}^\alpha + D_\alpha \eta_{\mu\nu}^\alpha = 0$$