

Erratum: Motion of Spin-Half Particles in the Axially Symmetric Field of Naked Singularities of the Static q -Metric [Gravitation and Cosmology 23 (2), 149–161 (2017)]

Vasily P. Neznamov*^{1,2} and Valery E. Shemarulin**¹

¹Russian Federal Nuclear Center—All-Russian Research Institute of Experimental Physics,
pr. Mira 37, Sarov, Nizhny Novgorod region, 607188 Russia

²National Research Nuclear University MEPhI, Moscow, Russia

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The following corrections are in order to the published paper [1]:

1. On page 149, Eq. (1), printed as

$$ds^2 = \left(1 - \frac{r_0}{r}\right)^{1+q} c^2 dt^2 - \left(1 - \frac{r_0}{r}\right)^{-q} \times \left[\left(1 + \frac{r_0 \sin^2 \theta}{4r^2 \left(1 - \frac{r_0}{r}\right)}\right)^{-q(2+q)} \times \left(\frac{dr^2}{1 - \frac{r_0}{r}} + r^2 d\theta^2\right) + r^2 \sin^2 \theta d\varphi^2 \right],$$

should read

$$ds^2 = \left(1 - \frac{r_0}{r}\right)^{1+q} c^2 dt^2 - \left(1 - \frac{r_0}{r}\right)^{-q} \times \left[\left(1 + \frac{r_0^2 \sin^2 \theta}{4r^2 \left(1 - \frac{r_0}{r}\right)}\right)^{-q(2+q)} \times \left(\frac{dr^2}{1 - \frac{r_0}{r}} + r^2 d\theta^2\right) + r^2 \sin^2 \theta d\varphi^2 \right],$$

$$\times \left(\frac{dr^2}{1 - \frac{r_0}{r}} + r^2 d\theta^2\right) + r^2 \sin^2 \theta d\varphi^2 \Big].$$

2. On page 150, Eq. (4), printed as

$$a(r, \theta) = \left(1 + \frac{r_0 \sin^2 \theta}{4r^2 f_S}\right)^{-q(2+q)},$$

should read

$$a(r, \theta) = \left(1 + \frac{r_0^2 \sin^2 \theta}{4r^2 f_S}\right)^{-q(2+q)}.$$

The above corrections do not affect the results.

REFERENCES

1. Grav. Cosmol. **23** (2), 149–161 (2017), doi 10.1134/S0202289317020050

*E-mail: neznamov@vniief.ru

**E-mail: shemarulin@vniief.ru