

Erratum to: Motion of a rigidly rotating circle in terms of Minkowski geometry

Stanisław L. Bazański

Received: 20 October 2011 / Accepted: 28 October 2011 / Published online: 29 November 2011
© Springer Science+Business Media, LLC 2011

Erratum to: Gen Relativ Gravit (2011) 43:3693–3703 DOI 10.1007/s10714-011-1254-y

Unfortunately, the next to last paragraph on p. 3700 of the published version of this article contained mistakes. The complete corrected paragraph is printed below:

We start now with carrying out two geometric constructions which are needed to define the unit of measurement of angles in radians in the osculating two-plane $\pi(x^1, x^2)$ at a point $p(\varphi_0)$ of the trajectory \mathcal{L}_0 . In the first, a chord of the osculating circle of \mathcal{L}_0 at $p(\varphi_0)$ is drawn in the direction parallel to the tangent vector ℓ at $p(\varphi_0)$. The chord intersects the osculating circle at two points, say p_1' and p_2' , cutting off an arc of length \mathcal{A} , which subtends an angle $\Delta\psi$ at its centre \mathcal{O} . The second construction consists in drawing two two-dimensional timelike planes π_1 and π_2 which are Minkowski-orthogonal to the osculating two-plane at $p(\varphi_0)$ and pass along one of the segments $[\mathcal{O}, p_1']$ or $[\mathcal{O}, p_2']$ correspondingly. The planes intersect \mathcal{L}_0 at two points p_1 and p_2 which are the ends of an arc $\mathcal{A}(p_1, p_2)$ of it, and the proper length of this arc is denoted by $\Delta\ell_0$.

The online version of the original article can be found under doi:[10.1007/s10714-011-1254-y](https://doi.org/10.1007/s10714-011-1254-y).

S. L. Bazański (✉)
Institute of Theoretical Physics, University of Warsaw, Hoża 69, 00-681, Warsaw, Poland
e-mail: bazanski@fuw.edu.pl