

Erratum: Testing gravity with wide binary stars like α Centauri

Indranil Banik^{1*}, Hongsheng Zhao¹

¹*Scottish Universities Physics Alliance, University of St Andrews, North Haugh, St Andrews, Fife, KY16 9SS, UK*

23 November 2018

Key words: errata, addenda, gravitation – dark matter – proper motions – binaries: general – Galaxy: disc – stars: individual: Proxima Centauri

Parameter	α Cen A+B	Proxima Cen
Right ascension	14 ^h 39 ^m 40.2068 ^s	14 ^h 29 ^m 47.7474 ^s
Declination	−60°50′13.673″	−62°40′52.868″

Table 1. Missing data in Table 5 of MNRAS, 480, 2660.

This is an erratum to the paper ‘Testing gravity with wide binary stars like α Centauri’, published in MNRAS, 480 (2), 2660 – 2688 (2018).

The second-last paragraph of its section 8.2 (on page 2679 or page 20 of the paper, shortly before its figure 11) mentioned the discovery of a 0.34 M_{\odot} object 0.54 in. from a 1.05 M_{\odot} star. The correct separation between these objects is 0.54 arcseconds on the sky.

Also, table 5 of that paper is missing the sky coordinates of the stars in the α Centauri system. We provide this information in Table 1, but do not reproduce the table as it is otherwise correct.

Equation 46 of the paper is incorrect and should be replaced with the equation below.

$$\alpha_{MC} = 2\pi \left(\frac{r}{d_*} \right)^3 f_{MC} \quad (1)$$

As these were purely typographical errors, the rest of the original publication is completely unaffected.

This paper has been typeset from a T_EX/L^AT_EX file prepared by the author.

* Email: ib45@st-andrews.ac.uk (Indranil Banik)
hz4@st-andrews.ac.uk (Hongsheng Zhao)