

Correction

Correction: Godzieba, D.A.; Radice, D. High-Order Multipole and Binary Love Number Universal Relations. *Universe* 2021, 7, 368

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The authors wish to make the following corrections to their paper [1]:

In Section 4, we accidentally swapped the numerators in the definitions of the fitting functions $\alpha(x)$ and $\beta(x)$ in Equation (8). The definitions are corrected as

$$\alpha(x) = \frac{\sum_{k=0}^3 p_k x^k}{\sum_{k=0}^2 q_k x^k} \text{ km} \quad \text{and} \quad \beta(x) = \frac{\sum_{k=0}^2 p_k x^k}{\sum_{k=0}^2 q_k x^k}, \quad (8)$$

where $x = (M/M_\odot - \mu_M)/\sigma_M$, $\mu_M = 1.1537$, and $\sigma_M = 0.15927$.

As a consequence of this error, Table 3 in Section 4 has the fitting parameters for $\alpha(x)$ and $\beta(x)$ incorrectly labelled. Additionally, it was not originally made clear in the table that we fix $q_2 = 1$ for all fits. The table is corrected to Table 3. All other results are unaffected by these corrections. The authors would like to apologize for any inconvenience caused to the readers by these changes.



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Table 3. Fitting parameters $\vec{p} = \{p_k\}$ and $\vec{q} = \{q_k\}$ for α and β as functions of $x = (M/M_\odot - \mu_M)/\sigma_M$, where $\mu_M = 1.1537$ and $\sigma_M = 0.15927$ for several values of M . The fitting functions are given in Equation (3).

M/M_\odot		p_0	p_1	p_2	p_3	q_0	q_1	q_2
1.4	$\beta(x)$	404.40	−96.991	26.475	−	65.755	−15.259	1
	$\alpha(x)$	224.75	−24.553	11.832	−1.8434	19.758	−1.9914	1
1.5	$\beta(x)$	502.01	−119.44	32.193	−	79.153	−16.598	1
	$\alpha(x)$	282.86	−29.568	12.893	−2.2628	24.833	−2.3357	1
1.6	$\beta(x)$	642.10	−152.88	40.447	−	98.054	−18.391	1
	$\alpha(x)$	386.63	−42.102	14.780	−3.0054	33.942	−3.2743	1
1.7	$\beta(x)$	877.56	−210.98	54.468	−	129.67	−21.419	1
	$\alpha(x)$	598.97	−73.554	18.854	−4.5818	52.655	−5.7193	1
1.8	$\beta(x)$	1442.2	−356.28	88.775	−	206.20	−29.608	1
	$\alpha(x)$	1291.3	−192.50	32.831	−10.064	113.87	−15.207	1
1.9	$\beta(x)$	2734.1	−709.62	174.36	−	380.72	−46.815	1
	$\alpha(x)$	3282.2	−592.78	80.705	−27.980	291.00	−48.054	1
2	$\beta(x)$	63,061	−19,071	3663.7	−	8959.4	−1478.5	1
	$\alpha(x)$	9986.9	−2011.9	232.61	−82.091	887.58	−167.09	1
2.14	$\beta(x)$	93,209	−34,415	6102.8	−	12,686	−2286.4	1
	$\alpha(x)$	58,353	−18,272	1904.6	−609.58	5234.8	−1543.2	1

Reference

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