

**Erratum: Search for gravitational waves from Scorpius X-1 in the first
Advanced LIGO observing run with a hidden Markov model
[Phys. Rev. D **95**, 122003 (2017)]**

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Equation (10) of the original article is in error; it should read [1]

$$h_0^{\text{eq}} = 5.5 \times 10^{-27} \left(\frac{F_X}{10^{-8} \text{ erg cm}^{-2} \text{ s}^{-1}} \right)^{1/2} \left(\frac{r_m}{10 \text{ km}} \right)^{1/4} \left(\frac{R_\star}{10 \text{ km}} \right)^{1/2} \left(\frac{1.4 M_\odot}{M_\star} \right)^{1/4} \left(\frac{300 \text{ Hz}}{f_\star} \right)^{1/2}, \quad (10)$$

where r_m , the accretion-torque lever arm, is evaluated at either the stellar radius R_\star or the Alfvén radius R_A . The upper limits $h_0^{95\%}$ presented in the original article are unaffected by this error.

In Fig. 4 of the original article, the theoretical torque-balance upper limit curve at the Alfvén radius should be multiplied by a factor

$$\frac{R_A^{1/4} R_\star^{1/2}}{R_A^{3/4}} = \left(\frac{R_\star}{R_A} \right)^{1/2} = \left(\frac{10 \text{ km}}{35 \text{ km}} \right)^{1/2} \sim 0.534.$$

A corrected version of this figure is provided here.

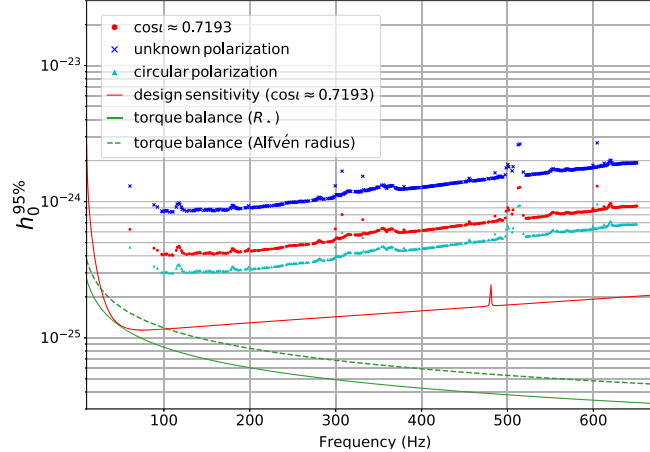


FIG. 4. Corrected version of Fig. 4 in the original article.

In Sec. V of the original article, the sentences

The resulting h_0^{eq} is shown as the green dashed curve in Fig. 4, giving $h_0^{95\%} \approx 2h_0^{\text{eq}}$ for electromagnetically restricted $\cos i$. At the design sensitivity of Advanced LIGO, we expect $h_0^{95\%} < h_0^{\text{eq}}$ in the band $30 \text{ Hz} \lesssim f_0 \lesssim 250 \text{ Hz}$.

should instead read

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The resulting h_0^{eq} is shown as the green dashed curve in Fig. 4, giving $h_0^{95\%} \approx 3.7h_0^{\text{eq}}$ for electromagnetically restricted $\cos i$. At the design sensitivity of Advanced LIGO, we expect $h_0^{95\%} < h_0^{\text{eq}}$ in the band $30 \text{ Hz} \lesssim f_0 \lesssim 100 \text{ Hz}$.

[1] Y. Zhang, M. A. Papa, B. Krishnan, and A. L. Watts, *Astrophys. J. Lett.* **906**, L14 (2021).