



# Erratum: “The Population of Viscosity- and Gravitational Wave-driven Supermassive Black Hole Binaries among Luminous Active Galactic Nuclei” (2009, ApJ, 700, 1952)

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The following minor errors have been found in the published article:

(1) In Equation (8), the front coefficient of 3.11 should be replaced by 3.8 and the scaling with  $f_T$  should be replaced by  $f_T^{1/10}$  to read

$$H(r) = (3.8R_S)\mu_e^{-1/10}\mu_0^{-2/5}\tilde{\kappa}_{\text{es}}^{1/10}f_T^{1/10}\alpha_{0.3}^{-1/10}\left(\frac{\dot{m}}{\epsilon_{0.1}}\right)^{1/5} \\ \times M_7^{-1/10}r_3^{21/20}.$$

(2) In Equation (9), the scaling with  $f_T$  should be replaced by  $f_T^{-1/10}$  to read

$$\Sigma(r) = (2.61 \times 10^5 \text{ g cm}^{-2})\mu_e^{-4/5}\mu_0^{3/4}\tilde{\kappa}_{\text{ff}}^{-1/10}f_T^{-1/10}\alpha_{0.3}^{-4/5} \\ \times \left(\frac{\dot{m}}{\epsilon_{0.1}}\right)^{7/10}M_7^{1/5}r_3^{-3/4}.$$

(3) In Equation (10), the scaling with  $f_T$  should be replaced by  $f_T^{1/20}$  to read

$$H(r) = (3.08R_S)\mu_e^{-1/10}\mu_0^{-3/8}\tilde{\kappa}_{\text{ff}}^{1/20}f_T^{1/20}\alpha_{0.3}^{-1/10}\left(\frac{\dot{m}}{\epsilon_{0.1}}\right)^{3/20} \\ \times M_7^{-1/10}r_3^{9/8}.$$

(4) In Equation (16), the exponent  $M_7^{52/25}$  should be replaced by  $M_7^{-52/25}$  to read

$$r_3^{\text{sg}} = 30.99\tilde{\mu}_0^{-1}\tilde{\mu}_e^{28/45}\tilde{f}_T^{143/60}\tilde{\kappa}_{\text{ff}}^{2/15}\alpha_{0.3}^{28/45}(\dot{m}_{0.1}/\epsilon_{0.1})^{-22/45} \\ \times M_7^{-52/45} \quad \text{if } \tilde{\kappa}_{\text{ff}} \rightarrow 1.$$

(5) In Equation 21(a), the coefficient  $2.82 \times 10^7 \text{ yr}$  should be replaced by  $5.55 \times 10^5 \text{ yr}$  to read

$$t_\nu = (5.55 \times 10^5 \text{ yr}) \times \tilde{\kappa}_{\text{es}}^{-2}\tilde{f}_T^{-2}\alpha_{0.3}^{-1}\left(\frac{\dot{m}_{0.1}}{\epsilon_{0.1}}\right)^{-2}M_7\chi^{7/2}r_3^{7/2} \\ \text{if } b = 0 \text{ and } r_3 \lesssim r_3^{\text{gas/rad}}.$$

(6) Equation (11) is missing an additional scaling with  $f_T$ , and should read

$$T(r) = (16\pi^2)^{-1/5}\left(\frac{\mu_0 m_{\text{H}}}{k_{\text{B}}\sigma_T}\right)^{1/5}f_T^{1/5}\alpha^{-1/5}\kappa^{1/5}\dot{M}^{2/5} \\ \times \Omega^{3/5}\beta^{-(1/5)(b-1)}.$$

These errors do not affect any of the figures, results, or conclusions of the paper.

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## Data Availability

The data underlying this article will be shared on reasonable request to the corresponding author.



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