Erratum: Radiation reaction in Schwarzschild spacetime: Retarded Green's function via Hadamard-WKB expansion [Phys. Rev. D 69, 064039 (2004)]

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In our paper (Ref. [1]), there were a few notational and transcription errors that we correct here.

(1) In Eq. (1.1) the general expression for the Hadamard form of the retarded Green's function was given incorrectly. It should read

$$G_{\text{ret}}(x, x') = \theta(x, x')\left\{\frac{u(x, x')}{4\pi}\delta[\sigma(x, x')] - \frac{v(x, x')}{8\pi}\theta[-\sigma(x, x')]\right\}. \tag{1}$$

(2) The relationships between our definitions of $u(x, x')$ and $v(x, x')$ above and $U(x, x')$ and $V(x, x')$ of Ref. [2] were given incorrectly. To obtain the correct relationships, first note that the convention for G_{ret} in Ref. [1] differs from that of Ref. [2]. To obtain that of Ref. [2] let $G_{\text{ret}} \rightarrow G_{\text{ret}}/(4\pi)$. Substituting this into Eq. (1) and comparing with Eq. (9) of Ref. [2] gives $u(x, x') = U(x, x')$ and $v(x, x') = 2V(x, x')$.

(3) In Eq. (3.9) of Ref. [1] the expressions for the following quantities should be multiplied by a minus sign: v_{201}, v_{111}, v_{103}, v_{021}, v_{013}, and v_{005}.

These errors do not affect any other equations or results in the paper.

[1] P. R. Anderson and B. L. Hu, Phys. Rev. D **69**, 064039 (2004).

[2] T. C. Quinn, Phys. Rev. D **62**, 064029 (2000).