Erratum: Persistent gravitational wave observables: Curve deviation in asymptotically flat spacetimes [Phys. Rev. D 105, 024056 (2022)]

Alexander M. Grant and David A. Nichols

In this paper, two errors appeared in the numerical coefficients in Eqs. (3.39a) and (4.40c). The corrected versions of these equations are as follows:

$$\underset{(1,0)}{\mathcal{G}}{}_{ij}^{\text{rad}} = \frac{1}{4}\text{STF}\,\mathscr{D}^k\left\{\left[C_{il}\mathscr{D}_m C^{lm} - \frac{3}{8}\mathscr{D}_i(C_{lm}C^{lm})\right]C_{jk} + \frac{5}{8}C_{lm}C^{lm}\mathscr{D}_i C_{jk}\right\},\tag{3.39a}$$

and

$$\underset{(1,1)}{\mathcal{G}}{}_{ij}^{\text{rad}} = \frac{1}{6}\text{STF}\,\mathscr{D}^k(C_{jk}\mathscr{D}^l\mathscr{D}_{[l}\mathscr{D}^m C_{i]m}).\tag{4.40c}$$

None of the conclusions of this paper are affected by these errors.

We thank the authors of [1] for uncovering these errors.

[1] Luc Blanchet, Geoffrey Compère, Guillaume Faye, Roberto Oliveri, and Ali Seraj, Multipole expansion of gravitational waves: Memory effects and Bondi aspects, arXiv:2303.07732.