Erratum: Detection template families for gravitational waves from the final stages of binary–black-hole inspirals: Nonspinning case [Phys. Rev. D 67, 024016 (2003)]

Alessandra Buonanno, Yanbei Chen, and Michele Vallisneri

(Received 11 July 2006; published 31 July 2006)

DOI: 10.1103/PhysRevD.74.029903 PACS numbers: 04.30.Db, 04.25.Nx, 04.80.Nn, 95.55.Ym, 99.10.Cd

A small error in the computation of the gravitational wave flux in Refs. [1,2] propagates to Eqs. (39) and (41) of this paper, which should be modified to read

$$\mathcal{F}_5(\eta) = -\left(\frac{8191}{672} + \frac{583}{24}\,\eta\right)\pi \tag{1}$$

and

$$\mathcal{F}_7(\eta) = \left(-\frac{16\,285}{504} + \frac{214\,745}{1728}\,\eta + \frac{193\,385}{3024}\,\eta^2\right)\pi. \tag{2}$$

By means of order-of-magnitude arguments and of limited numerical tests, we have determined that the gravitational waveform corrections resulting from these changes are too small to affect the main quantitative results of this paper.

In addition, we point out that the previously unknown value of the parameter $\hat{\theta}$ of Eq. (1), which enters the gravitational wave flux at the 3PN order, has been determined to be $1039/4620$ [3].

[1] L. Blanchet, Phys. Rev. D **54**, 1417 (1996); Classical Quantum Gravity **15**, 113 (1998).
[2] L. Blanchet, G. Faye, B. R. Iyer, and B. Joguet, Phys. Rev. D **65**, 061501(R) (2002); L. Blanchet, B. R. Iyer, and B. Joguet, Phys. Rev. D **71**, 129903(E) (2005).
[3] L. Blanchet, T. Damour, G. Esposito-Farèse, and B. R. Iyer, Phys. Rev. Lett. **93**, 091101 (2004).

