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Erratum: Comparison of search templates for gravitational waves from binary inspiral [Phys. Rev. D 63, 044023 (2001)]

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Recently [1], an erratum has appeared correcting some coefficients in the computation of tails in the flux of gravitational waves $\mathcal{L}$ from compact binaries in Ref. [2]. As a consequence, some post-Newtonian coefficients in the paper [3] are modified. The correction affects only the η-dependent terms in the coefficients at 2.5PN order, i.e. column 6 of Table I.

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TABLE . Taylor coefficients of the flux, phase, time and frequency. N denotes the "Newtonian value" and $\theta = [\eta(t_{\rm lso} - t)/(5m)]^{-1/8}$. In all cases the $k = 0$ coefficient is 1 and the $k = 1$ coefficient is zero. In certain cases the 2.5 PN term involves $v^5 \log v$ or $\theta^5 \log\theta$ term rather than a v^5 or θ^5 term. In those cases we conventionally include the $\log v$ dependence in the listed coefficient. Chirp parameters τ_k, $k \geq 1$, are related to the expansion parameters t_k^v and ϕ_k^v via $\tau_k = (8\phi_k^v - 5t_k^v)/3$. We have given the simplified expressions for these in all cases, except $k = 5$ where no simplification occurs due to the presence of the log term in ϕ_5^v.

k	N	2	3	4	5
$\hat{\mathcal{F}}_k$	$\frac{32\eta^2 v^{10}}{5}$	$-\frac{1247}{336} - \frac{35\eta}{12}$	4π	$-\frac{44711}{9072} + \frac{9271\eta}{504} + \frac{65\eta^2}{18}$	$-(\frac{8191}{672} + \frac{583\eta}{24})\pi$
$\hat{t}_k^v$	$-\frac{5m}{256\eta v^8}$	$\frac{743}{252} + \frac{11\eta}{3}$	$-\frac{32\pi}{5}$	$\frac{3058673}{508032} + \frac{5429\eta}{504} + \frac{617\eta^2}{72}$	$-(\frac{7729}{252} - \frac{13}{3}\eta)\pi$
$\hat{\phi}_k^v$	$-\frac{1}{16\eta v^5}$	$\frac{3715}{1008} + \frac{55\eta}{12}$	-10π	$\frac{15293365}{1016064} + \frac{27145\eta}{1008} + \frac{3085\eta^2}{144}$	$(\frac{38645}{672} - \frac{65\eta}{8})\pi \ln(\frac{v}{v_{\rm lso}})$
$\hat{\phi}_k^t$	$-\frac{2}{\eta\theta^5}$	$\frac{3715}{8064} + \frac{55\eta}{96}$	$-\frac{3\pi}{4}$	$\frac{9275495}{14450688} + \frac{284875\eta}{258048} + \frac{1855\eta^2}{2048}$	$(\frac{38645}{21504} - \frac{65\eta}{256})\pi \ln(\frac{\theta}{\theta_{\rm lso}})$
$\hat{F}_k^t$	$\frac{\theta^3}{8\pi m}$	$\frac{743}{2688} + \frac{11\eta}{32}$	$-\frac{3\pi}{10}$	$\frac{1855099}{14450688} + \frac{56975\eta}{258048} + \frac{371\eta^2}{2048}$	$-(\frac{7729}{21504} - \frac{13}{256}\eta)\pi$
$\hat{\tau}_k$	$\frac{3}{128\eta}$	$\frac{5}{9}(\frac{743}{84} + 11\eta)$	-16π	$2\phi_4^v$	$\frac{1}{3}(8\phi_5^v - 5t_5^v)$

[1] L. Blanchet, Phys. Rev. D **71**, 129904(E) (2005).
[2] L. Blanchet, Phys. Rev. D **54**, 1417 (1996).
[3] T. Damour, B. R. Iyer, and B. S. Sathyaprakash, Phys. Rev. D **63**, 044023 (2001).

