Corrigendum: The third post-Newtonian gravitational wave polarizations and associated spherical harmonic modes for inspiralling compact binaries in quasi-circular orbits

This article has been downloaded from IOPscience. Please scroll down to see the full text article.
2012 Class. Quantum Grav. 29 239501
(http://iopscience.iop.org/0264-9381/29/23/239501)

View the table of contents for this issue, or go to the journal homepage for more

Download details:
IP Address: 203.200.35.14
The article was downloaded on 20/12/2012 at 05:08

Please note that terms and conditions apply.
Corrigendum: The third post-Newtonian gravitational wave polarizations and associated spherical harmonic modes for inspiralling compact binaries in quasi-circular orbits

2008 Class. Quantum Grav. 25 165003

Luc Blanchet¹, Guillaume Faye¹, Bala R Iyer² and Siddhartha Sinha²,³

¹ GReC/Co, Institut d’Astrophysique de Paris—CNRS, 98ème boulevard Arago, F-75014 Paris, France
² Raman Research Institute, Bangalore 560 080, India
³ Department of Physics, Indian Institute of Science, Bangalore 560 012, India

E-mail: blanchet@iap.fr, faye@iap.fr, bri@rri.res.in and meetsiddhartha@gmail.com

Received 19 October 2012
Published 7 November 2012
Online at stacks.iop.org/CQG/29/239501

In the paper [1], we have noticed a calculational error in the current quadrupole source moment \( J_{ij} \) at 2.5PN order. As a result the expressions of \( J_{ij} \) at 2.5PN order, of the polarization waveforms \( H^{(3)} \) and \( H^{(3)}\times \) at 3PN order, and of the spherical harmonic mode \( \hat{H}_{21} \) at 3PN order have to be corrected. The changes are as follows.

1. Equation (5.15b), second line, coefficient of the term \(-v \Delta \gamma^2 \nu_{ab} \nu_{ij} x^ax^b\): 
   \[-\frac{484}{105} \rightarrow -\frac{188}{35}\]

2. Equation (8.9g), 17th line, coefficient of the term \( s_i \sin(\psi) \nu\): 
   \[\frac{81 \, 127}{10 \, 080} \rightarrow \frac{1369}{160}\]

3. Equation (8.10g), second line, coefficient of the term \( s_i c_i \cos(\psi) \nu\): 
   \[-\frac{48 \, 239}{50 \, 420} \rightarrow -\frac{2419}{240}\]

4. Equation (9.4b), third line, coefficient of the term \( i \Delta (x^3) \): 
   \[-\frac{995}{84} \rightarrow -\frac{353}{28}\]

References