Erratum: Lepton-mediated electroweak baryogenesis, gravitational waves and the 4τ final state at the collider

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Eq. (B.4) should be [1]

$$\Gamma_Y = \frac{3y_\tau^2}{4\pi^3 T_n^2}(m_h^2 - m_\ell^2 - m_\tau^2)\int_{m_\tau}^{\infty} d\omega_R h_F(\omega_R)\ln\left(\frac{e^{\omega_R/T_n} + e^{\omega_-/T_n}}{e^{\omega_R/T_n} + e^{\omega_+/T_n}}\frac{e^{\omega_+/T_n} - 1}{e^{\omega_-/T_n} - 1}\right)$$
$$+\frac{3\zeta_3}{32\pi^3}g^2 y_\tau^2 T_n\left[\left(1 + \frac{1}{6}\tan^2\theta_W\right)\ln\frac{8T_n^2}{m_\ell^2} + \frac{2}{3}\tan^2\theta_W\ln\frac{8T_n^2}{m_\tau^2}\right],$$

while in its original version the second line was mistaken to be $\propto g_s^2$. After correcting this, the washout effect from Yukawa interaction is weakened and hence the generated η_B in the right panel of figure 2 increases by $1\% \sim 20\%$, depending on v_w. The improved figure 2 (right panel) is as follows.
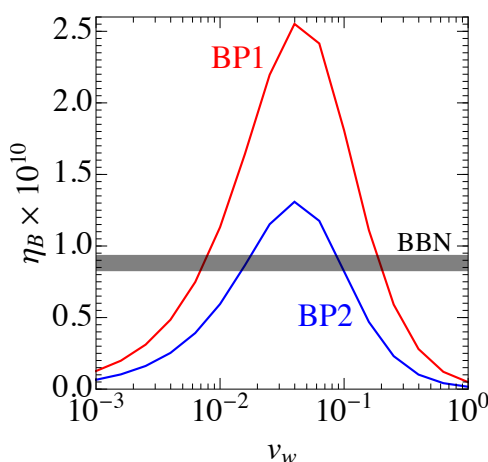
References

[1] M. Joyce, T. Prokopec and N. Turok, *Nonlocal electroweak baryogenesis. Part I. Thin wall regime*, *Phys. Rev. D* **53** (1996) 2930 [hep-ph/9410281] [INSPIRE].