

## Erratum: Implication of the Proton-Deuteron Radiative Capture for Big Bang Nucleosynthesis [Phys. Rev. Lett. 116, 102501 (2016)]

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Some of the results presented in the paper are erroneous, due to a minor mistake in the numerical implementation in the PARTHENOPE code of the reported *ab initio* calculation of the astrophysical  $S$  factor. Therefore, for the Planck 2015 value of  $\Omega_b h^2$  and standard  $N_{\text{eff}}$ , the new value for  ${}^2\text{H}/\text{H}_{\text{th}}$  reported below Fig. 2 is  $2.46 \pm 0.03 \pm 0.03$ . Correspondingly, marginalizing over baryon energy density, we now find  $N_{\text{eff}} = 3.25 \pm 0.16(0.32)$ . Also Fig. 2 should be replaced by the new figure below. We remark that the conclusions of the present work remain unchanged.

Finally, we would like to acknowledge the correspondence with Kenneth Nollett, which led us to perform further checks of our previous results.

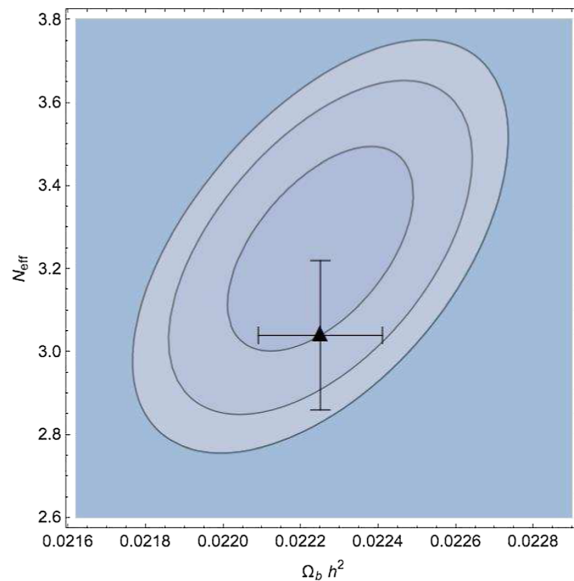


FIG. 1. The likelihood contours (68%, 95%, and 99% C.L.) in the  $\Omega_b h^2$ - $N_{\text{eff}}$  plane from  ${}^2\text{H}/\text{H}$ , with the Planck 2015 prior on  $\Omega_b h^2$ , a free  $N_{\text{eff}}$  and using the experimental result of Ref. [1]. The triangle is the best fit value of Planck 2015 results for these parameters, with corresponding 68% C.L. error bars [2].

[1] R. Cooke, M. Pettini, R. A. Jorgenson, M. T. Murphy, and C. C. Steidel, *Astrophys. J.* **781**, 31 (2014).

[2] P. A. R. Ade *et al.* (Planck Collaboration), [arXiv:1502.01589](https://arxiv.org/abs/1502.01589).