

# Erratum: Hints of unitarity at large $N$ in the $O(N)^3$ tensor field theory

Dario Benedetti,<sup>a</sup> Razvan Gurau,<sup>a,b</sup> Sabine Harribey<sup>a</sup> and Kenta Suzuki<sup>a</sup>

<sup>a</sup>CPHT, CNRS, Ecole Polytechnique, Institut Polytechnique de Paris,  
Route de Saclay, 91128 Palaiseau, France

<sup>b</sup>Perimeter Institute for Theoretical Physics,  
31 Caroline St. N, Waterloo, ON, N2L 2Y5, Canada

E-mail: [dario.benedetti@polytechnique.edu](mailto:dario.benedetti@polytechnique.edu),  
[rgurau@cpht.polytechnique.fr](mailto:rgurau@cpht.polytechnique.fr), [sabine.harribey@polytechnique.edu](mailto:sabine.harribey@polytechnique.edu),  
[kenta.suzuki@polytechnique.edu](mailto:kenta.suzuki@polytechnique.edu)

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The measure in equation (2.11) contains a wrong normalization factor, and it should be multiplied by  $2^{1-d}\Gamma(d-1)/\Gamma(d/2)^2$ . Therefore, the correct result reads

$$\begin{aligned} \mu_{\Delta_\phi}^d(h, J) &= \left( \frac{1 + (-1)^J}{2} \right) \frac{\Gamma(J + \frac{d}{2})}{\Gamma(J + 1)} \\ &\times \frac{\Gamma(\frac{d}{2} - \Delta_\phi)^2 \Gamma(\frac{2\Delta_\phi - d + h + J}{2}) \Gamma(\frac{2\Delta_\phi - h + J}{2}) \Gamma(h - 1) \Gamma(d - h + J) \Gamma(\frac{h + J}{2})^2}{\Gamma(\Delta_\phi)^2 \Gamma(\frac{2d - 2\Delta_\phi - h + J}{2}) \Gamma(\frac{d - 2\Delta_\phi + h + J}{2}) \Gamma(h - \frac{d}{2}) \Gamma(h + J - 1) \Gamma(\frac{d - h + J}{2})^2}. \end{aligned}$$

This error does not affect any qualitative result, but it alters several equations which should be multiplied by the same factor. The concerned equations are: (1.5), (1.6), (3.11), (3.12), (3.14), (3.16), (3.18), (3.23), (3.24), (3.25), (A.1), (A.4), (A.6), (B.3).

A similar normalization error affects also the special  $d = 1$  case in section 3.4, where equations (3.28), (3.31), (3.32), and the second line of (3.33) should be multiplied by a factor  $2\pi/3$ .

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