Erratum: Anomalous scaling and large-scale anisotropy in magnetohydrodynamic turbulence: Two-loop renormalization-group analysis of the Kazantsev-Kraichnan kinematic model [Phys. Rev. E 85, 065301(R) (2012)]

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Equation (9) for the two-loop correction $\Delta_{n,l}^{(2)}$ to the scaling dimension of the composite field (3) contains an error. The correct equation reads

$$\Delta_{n,l}^{(2)} = -\frac{2n(n-2)}{125} - \frac{n(n+3)}{30} + \frac{22l(l+1)}{375} - \frac{3(n-2)}{175} \left(-\sqrt{3}\pi + \frac{82}{15}\right) [2n(n-4) + 3l(l+1)] - \frac{19(n-2)}{350} \left(-\sqrt{3}\pi + \frac{1568}{285}\right) [n(n+3) - 2l(l+1)].$$
(9)

The difference is in the last line of the expression. Thus, the inequality in the text above Eq. (11) should read

 $\partial \Delta_{n\,l}^{(2)} / \partial l \simeq (2l+1)(0.0053n+0.0482) > 0,$

whereas, Eq. (11) should read

$$\Delta_{n,0}^{(2)} \simeq -0.0041n^3 - 0.0474n^2 - 0.0553n.$$
⁽¹¹⁾

The main conclusions of the paper remain unchanged: The anomalous scaling and the hierarchy of anisotropic contributions are enhanced by the two-loop correction.

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