

Erratum: Tracing the trace anomaly of dense matter inside neutron stars [Phys. Rev. D **113**, 123012 (2026)]

Shiyue Ren¹ and Lap-Ming Lin²

(Received 28 July 2026; published 21 September 2026)

DOI: [10.1103/3nqq-7t2h](https://doi.org/10.1103/3nqq-7t2h)

Table II of the original paper listed the coefficients c_{km} for Eq. (3). However, due to the high-order polynomials used in Eq. (3), the four significant figures of the coefficients presented in the table were insufficient to faithfully reproduce the

TABLE II. 8th-order polynomial coefficients c_{km} for Eq. (3).

(a) $X - \mathcal{C}$ relation			(b) $X - \ln \bar{l}$ relation			(c) $X - \ln \Lambda$ relation		
k	m	c_{km}	k	m	c_{km}	k	m	c_{km}
1	0	2.425 656 2	1	0	$1.254\,887\,8 \times 10^2$	1	0	$2.792\,869\,4 \times 10^{-1}$
	1	$-1.155\,041\,5 \times 10^2$		1	$-3.345\,332\,2 \times 10^2$		1	$-7.538\,917\,9 \times 10^{-3}$
	2	$2.123\,855\,6 \times 10^3$		2	$3.779\,056\,9 \times 10^2$		2	$-3.121\,349\,1 \times 10^{-2}$
	3	$-2.043\,250\,1 \times 10^4$		3	$-2.337\,582\,9 \times 10^2$		3	$1.640\,517\,0 \times 10^{-2}$
	4	$1.122\,386\,2 \times 10^5$		4	$8.537\,176\,1 \times 10^1$		4	$-4.950\,323\,5 \times 10^{-3}$
	5	$-3.531\,586\,8 \times 10^5$		5	$-1.839\,414\,5 \times 10^1$		5	$7.917\,890\,4 \times 10^{-4}$
	6	$5.920\,153\,5 \times 10^5$		6	2.163 923 4		6	$-6.213\,618\,1 \times 10^{-5}$
2	7	$-4.097\,308\,7 \times 10$		7	$-1.071\,931\,2 \times 10^{-1}$		7	$1.891\,762\,4 \times 10^{-6}$
	0	$8.668\,973\,2 \times 10^{-2}$	2	0	$8.912\,868\,9 \times 10^1$	2	0	7.303 086 9
	1	$5.095\,494\,4 \times 10^1$		1	$-1.429\,792\,9 \times 10^2$		1	-3.222 838 3
	2	$-8.652\,382\,4 \times 10^2$		2	$431\,720\,7 \times 10^1$		2	$7.225\,586\,8 \times 10^{-1}$
	3	$8.112\,139\,5 \times 10^3$		3	$-3.024\,877\,4 \times 10^1$		3	$-7.772\,170\,0 \times 10^{-2}$
	4	$-3.952\,454\,3 \times 10^4$		4	4.307 080 9		4	$2.673\,085\,3 \times 10^{-3}$
	5	$9.598\,235\,9 \times 10^4$		5	$-8.681\,379\,6 \times 10^{-2}$		5	$1.646\,159\,0 \times 10^{-4}$
	6	$-8.913\,371\,8 \times 10^4$		6	$-2.538\,421\,8 \times 10^{-2}$		6	$-1.209\,235\,0 \times 10^{-5}$
3	0	-5.996 896 2	3	0	$-1.298\,821\,2 \times 10^2$	3	0	$-1.825\,890\,7 \times 10^1$
	1	-4.864 172 9		1	$1.655\,949\,5 \times 10^2$		1	6.214 057 4
	2	$-3.241\,866\,7 \times 10^2$		2	$-9.900\,853\,7 \times 10^1$		2	-1.154 426 7
	3	$2.018\,073\,1 \times 10^3$		3	$3.158\,766\,8 \times 10^1$		3	$1.162\,439\,0 \times 10^{-1}$
	4	$-5.714\,628\,1 \times 10^3$		4	-5.242 948 7		4	$-6.605\,562\,8 \times 10^{-3}$
	5	$3.630\,918\,2 \times 10^3$		5	$3.604\,585\,7 \times 10^{-1}$		5	$1.915\,615\,4 \times 10^{-4}$
4	0	$2.013\,397\,7 \times 10^1$	4	0	$1.205\,638\,5 \times 10^2$	4	0	$2.285\,077\,3 \times 10^1$
	1	$7.565\,992\,4 \times 10^1$		1	$-7.188\,275\,0 \times 10^1$		1	-5.742 352 7
	2	$-9.581\,696\,5 \times 10^1$		2	$2.142\,217\,2 \times 10^1$		2	$7.494\,261\,1 \times 10^{-1}$
	3	$3.085\,602\,2 \times 10^2$		3	-2.959 793 5		3	$-3.896\,252\,7 \times 10^{-2}$
	4	$8.564\,583\,8 \times 10^2$		4	$1.167\,947\,5 \times 10^{-1}$		4	$2.683\,264\,4 \times 10^{-4}$
5	0	$-4.526\,716\,9 \times 10^1$	5	0	$-1.282\,325\,9 \times 10^2$	5	0	$-1.401\,830\,5 \times 10^1$
	1	$-8.055\,664\,5 \times 10^1$		1	$4.051\,178\,8 \times 10^1$		1	2.890 473 7
	2	-4.264 432 4		2	-7.129 656 0		2	$-3.029\,510\,0 \times 10^{-1}$
	3	$-3.607\,022\,0 \times 10^2$		3	$6.272\,346\,4 \times 10^{-1}$		3	$1.265\,761\,1 \times 10^{-2}$
6	0	$5.533\,281\,3 \times 10^1$	6	0	$9.810\,269\,8 \times 10^1$	6	0	0.000 000 0
	1	$5.475\,613\,0 \times 10^1$		1	$-1.400\,187\,7 \times 10^1$		1	$-4.582\,232\,6 \times 10^{-1}$
	2	$6.367\,640\,9 \times 10^1$		2	$6.322\,266\,6 \times 10^{-1}$		2	$2.102\,433\,6 \times 10^{-2}$
7	0	$-3.529\,621\,1 \times 10^1$	7	0	$-4.597\,584\,0 \times 10^1$	7	0	4.554 442 8
	1	$-2.060\,726\,8 \times 10^1$		1	2.813 841 9		1	$-3.710\,836\,0 \times 10^{-3}$
8	0	9.333 669 2	8	0	9.333 669 2	8	0	-1.758 914 2

quasiuniversal relations. In this erratum, we list the coefficients with more significant figures. The changes do not affect the main results and conclusions of the original paper.

The authors acknowledge Valentina Sulis and Chun-Sing Wong for pointing out the discrepancy between the prediction of Eq. (3) using the original coefficients and the results presented in the paper.