International Journal of Theoretical Physics (2022) 61: 194
https://doi.org/10.1007/s10773-022-05186-8

CORRECTION

Correction to: Sum Uncertainty Relations Based on (α,β,γ) Weighted Wigner-Yanase-Dyson Skew Information

Cong Xu[1] · Zhaoqi Wu[1] · Shao-Ming Fei[2,3]

Published online: 18 July 2022

Correction to: Int J Theor Phys (2022) 61:185
https://doi.org/10.1007/s10773-022-05160-4

The original version of this article unfortunately contained two mistakes.

(1) The second author Zhaoqi Wu is not connected to affiliation 2. Instead, Zhaoqi Wu is connected to affiliation 1. The third author Shao-Ming Fei belongs to both affiliation 2 and affiliation 3, instead of affiliation 3. The correct information is shown in this erratum.

(2) The authors wish to correct a typographical error found in the original article. Equation (32) and the equation in the proof of Theorem 8 has writing mistake. The correct equation (32) is found below:

$$\sum_{i=1}^{N} \mathrm{K}_{\rho,\gamma}^{\alpha,\beta}(A_i) \geq \binom{N-2}{k-1}^{-1} \left[\sum_{1\leq i_1<\cdots<i_k\leq N} \mathrm{K}_{\rho,\gamma}^{\alpha,\beta}\left(\sum_{j=1}^{k} A_{i_j}\right) - \binom{N-2}{k-2}\binom{N-1}{k-1}^{-2} \left(\sum_{1\leq i_1<\cdots<i_k\leq N} \sqrt{\mathrm{K}_{\rho,\gamma}^{\alpha,\beta}\left(\sum_{j=1}^{k} A_{i_j}\right)} \right)^2 \right], \alpha, \beta \geq 0, \alpha+\beta \leq 1, 0 \leq \gamma \leq 1. \tag{32}$$

The original article can be found online at https://doi.org/10.1007/s10773-022-05160-4

✉ Zhaoqi Wu
wuzhaoqi_conquer@163.com

1 Department of Mathematics, Nanchang University, Nanchang 330031, People's Republic of China

2 School of Mathematical Sciences, Capital Normal University, Beijing 100048, People's Republic of China

3 Max-Planck-Institute for Mathematics in the Sciences, 04103 Leipzig, Germany

instead of

$$\sum_{i=1}^{N} \mathrm{K}_{\rho,\gamma}^{\alpha,\beta}(A_i) \geq \binom{N-2}{k-1}^{-1} \left[\sum_{1\leq i_1<\cdots<i_k\leq N} \mathrm{K}_{\rho,\gamma}^{\alpha,\beta}\left(\sum_{j=1}^{k} A_{i_j}\right) - ()\binom{N-1}{k-1}^{-2} \left(\sum_{1\leq i_1<\cdots<i_k\leq N} \sqrt{\mathrm{K}_{\rho,\gamma}^{\alpha,\beta}\left(\sum_{j=1}^{k} A_{i_j}\right)} \right)^2 \right], \alpha, \beta \geq 0, \alpha+\beta \leq 1, 0 \leq \gamma \leq 1. \tag{32}$$

In the proof of Theorem 8, the correct equation is found below:

$$\sum_{i=1}^{N} \|u_i\|^2 \geq \binom{N-2}{k-1}^{-1} \left[\sum_{1\leq i_1<\cdots<i_k\leq N} \|u_{i_1} + \cdots + u_{i_k}\|^2 - \binom{N-2}{k-2}\binom{N-1}{k-1}^{-2} \left(\sum_{1\leq i_1<\cdots<i_k\leq N} \|u_{i_1} + \cdots + u_{i_k}\| \right)^2 \right].$$

instead of

$$\sum_{i=1}^{N} \|u_i\|^2 \geq \binom{N-2}{k-1}^{-1} \left[\sum_{1\leq i_1<\cdots<i_k\leq N} \|u_{i_1} + \cdots + u_{i_k}\|^2 - ()\binom{N-1}{k-1}^{-2} \left(\sum_{1\leq i_1<\cdots<i_k\leq N} \|u_{i_1} + \cdots + u_{i_k}\| \right)^2 \right].$$