Detailed balance and intermediate statistics

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Corrigendum

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This corrigendum concerns the Fermi limit, $\alpha \to 1$. The limits in equations (28) and (29) are not correct as stated. In fact if we employ the result for the Fermi limit $[n] \to (-1)^{n+1}n$, as stated in the text after equation (7), and evaluate the limits carefully, we find that the enhancement factor $F(n)$ vanishes as $\alpha \to 1$. Indeed all the probabilities in equations (15) and (16) vanish in the Fermi limit and so does the ratio in equation (17). Contrary to what is stated in the text after equation (29), our interpolating statistics has the correct Fermi limit obeying the exclusion principle, as one would expect, and it does not lead to generalized Fermions. Statements in the first and last section of the paper on the need for generalized Fermions should be revised accordingly. This observation does not alter the analysis and conclusions of our work.

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