



**Correction: Correction to "Laplace's Method for Gaussian Integrals with an Application to Statistical Mechanics"**

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## CORRECTION

### LAPLACE'S METHOD FOR GAUSSIAN INTEGRALS WITH AN APPLICATION TO STATISTICAL MECHANICS<sup>1</sup>

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Chii-Ruey Hwang and Tzoo-Shuh Chiang have found an error on page 62 of our paper, which invalidates our proof of the upper bound (1.12). However, a correct proof of (1.12) has been found recently. In fact, E. Bolthausen has proved a large deviations result for sums of i.i.d. random vectors which take values in a real separable Banach space and which are distributed by probability measures  $\{\mu_n\}$  converging weakly to a probability measure  $\mu$  ("On the Probability of Large Deviations in Banach Spaces", Technische Universität Berlin preprint, 1982). This result includes the Gaussian bounds (1.12) and (1.13) as special cases.

*The Error.* On page 62, we claim that  $\cap_{\delta_i} \mathcal{A}_{\delta_i} \subseteq \mathcal{A}$ . This is wrong. Since  $\mathcal{A}_{\delta_i}$  is defined in terms of an  $L^2[0, 1]$ -neighborhood of  $\mathcal{A}$ , it is easy to find examples of proper closed subsets  $\mathcal{A}$  in  $C[0, 1]$  for which  $\mathcal{A}_{\delta_i}$  is all of  $C[0, 1]$  and  $\cap_{\delta_i} \mathcal{A}_{\delta_i}$  is not a subset of  $\mathcal{A}$ . Hence (1.12) is not proved correctly.

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### ACKNOWLEDGMENT OF PRIORITY<sup>2</sup>

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It has been pointed out to me that the results of my articles, "Distribution of symmetric stable laws of index  $2^{-n}$ ", *Ann. Probability* **9** (1981) 710–711 and "Symmetric stable laws of index  $2^{-n}$ ", *Ann. Probability* **10** (1982) 857–859, were also obtained by G. W. Brown and J. W. Tukey in "Some distributions of sample means", *Ann. Math. Statist.* **17** (1946) 1–12.

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<sup>2</sup> Received October 1982.