

ERRATA

Novel Superuniversal Behavior of a Random-Walk Model. H. EUGENE STANLEY, KIHO KANG, SIDNEY REDNER, and ROBIN L. BLUMBERG [Phys. Rev. Lett. 51, 1223 (1983)].

One of the results of Ref. 1 is in error. Specifically, from analysis of series expansions, we reported¹ that $S(N, p = p_c) \sim N^\alpha$, with α being roughly $\frac{2}{3}$ for all spatial dimensions d ; here $S(N, p)$ is the mean number of sites visited by an N -step random walk on a lattice with randomly distributed traps of concentration $c = 1 - p$. The trapping problem is isomorphic to our interacting-random-walk model. We have learned that the interacting-walk problem was treated independently in the mathematical literature,² where it was shown that for all values of $p < 1$, $S(N, p) \sim N^\alpha$ with $\alpha = d/(d + 2)$. To resolve this discrepancy, we extended our series in $d = 2$ and found results in accord with Ref. 2. Also, recent Monte Carlo work³ differs from Ref. 2 but only by about 6%.

The physical basis for this remarkably slow crossover is that a walk on a lattice with randomly distributed traps encounters relatively large trap-free regions. Because of the dominant role of such rare events, the most probable value of an observable and the average value do not coincide. The underlying probability distribution is sufficiently skewed that one must obtain numerical data from a *nonzero* fraction of the sample space in order that the average value be correctly measured. Exact enumeration methods can correctly sample even skewed probability distributions and hence will work provided the series are long enough to account for the very slow crossover of the trapping problem. We anticipate that similar remarks apply to other physical phenomena controlled by rare events, where anomalous probability distributions lead to slow crossovers.

We wish to thank Y. Oono and Y. Shapir for calling Ref. 2 to our attention and H. Meirovitch for informing us about his Monte Carlo work.

¹H. E. Stanley, K. Kang, S. Redner, and R. L. Blumberg, Phys. Rev. Lett. 51, 1223 (1983).

²M. D. Donsker and S. R. S. Varadhan, Commun. Pure Appl. Math. 32, 721 (1979).

³H. Meirovitch, private communication.

Tests of Models for Parton Fragmentation by Means of Three-Jet Events in e^+e^- Annihilation at $\sqrt{s} = 29$ GeV. H. AIHARA, M. ALSTON-GARNJOST, J. A. BAKKEN, A. BARBARO-GALTIERI, A. V. BARNES,

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The last sentence of page 271, which spills over to page 272, was printed as follows: “. . . jets 1, 2, and 3 are the gluon jets in 7%, 8%, and 55% of the events, respectively.” This should read “. . . are the gluon jets in 7%, 18% and 55% of the events. . . .”

Physical CP Phase and Maximal CP Nonconservation. M. GRONAU and J. SCHECHTER [Phys. Rev. Lett. 54, 385 (1985)].

The matrix element in the first column, second row of Eq. (2) should read

$$- [c_{23}s_{12}c_{13}e^{-i\phi_{12}} + s_{13}s_{23}e^{i(\phi_{23}-\phi_{13})}].$$

On page 387, in the right-hand column, the sixteenth line from the top should start with the quantity

$$\times [1 - |U_{ub}/U_{cb}U_{us}|^2]^{1/2}.$$

The piece of Eq. (10) within the square brackets should read

$$\left[-0.7 + 0.4 \ln \frac{m_t^2}{m_c^2} + 0.6 s_{23}^2 \frac{m_t^2}{m_c^2} \left(1 - \frac{s_{13}}{s_{12}s_{23}} \cos\Phi \right) \right].$$

On page 388, left-hand column, in the last line replace $s_{ij} \rightarrow s_{ij}$ by $s_{ij} \rightarrow -s_{ij}$.