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ERRATA

Erratum: ''Finite-size scaling of helix–coil transitions in poly-alanine studied by multicanonical simulations'' [J. Chem. Phys. 110, 1267 (1999)]

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While our article, ''Finite-size scaling of helix–coil transitions in poly-alanine studied by multicanonical simulations,'' was in print, one of us (U.H.) has performed additional multicanonical poly-alanine simulations, increasing the total number of Monte Carlo sweeps to 400 000, 500 000, 1 000 000, and 3 000 000 sweeps for $N=10$, 15, 20, and 30, respectively. Here, N is the length of the poly-alanine chain. Taking the increased statistics into account and defining the susceptibility χ_N instead of Eq. (11) by

$$\chi_N(T)=\frac{1}{N}\left(\langle q^2\rangle_T-\langle q\rangle_T{}^2\right), \tag{1}$$

we have to replace Table IV by the following:

TABLE IV. Maximum of specific heat $C_{\max}$ and susceptibility $\chi_{\max}$ together with the width of the peak of the specific heat Γ_C and the width of the peak of the susceptibility Γ_χ for various chain lengths.

N	T_c	$C_{\max}$	Γ_C	$\chi_{\max}$	Γ_χ
10	427(7)	8.9(3)	160(7)	0.49(2)	140(7)
15	492(5)	12.3(4)	119(5)	0.72(3)	110(5)
20	508(5)	16.0(8)	88(5)	1.08(3)	78(5)
30	518(7)	22.8(1.2)	58(4)	1.50(8)	56(3)

Using the scaling relations Eqs. (16)–(19), our improved results now lead to the following critical exponents (as defined in the article):

$$\nu=1.0(1), \quad \alpha=0.9(1), \quad \text{and} \quad \gamma=1.1(1). \tag{2}$$

A more detailed discussion of these exponents and the hyperscaling relation between them will be included in a forthcoming article [N. Alves and U. H. E. Hansmann, ''Partition function zeros and finite size scaling of helix–coil transitions in polypeptides'' (submitted)].

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