

Erratum

A polymer chain trapped between two parallel repulsive walls: A Monte-Carlo test of scaling behavior

A. Milchev^{1,a} and K. Binder^{2,b}¹ Institute for Physical Chemistry, Bulgarian Academy of Sciences, 1113 Sofia, Bulgaria² Institut für Physik, Johannes Gutenberg-Universität Mainz 55099 Mainz, Staudinger Weg 7, GermanyEur. Phys. J. B **3**, 477–484 (1998)

F. Schlesener kindly pointed out that in the scaling plot for the force, Df , versus D/R_{gb} in our Figure 4, the data was plotted with the wrong set of values for the radius of gyration R_{gb} . The Df data points have been plotted erroneously versus $D/\sqrt{R_{gb}}$, rather than versus D/R_{gb} . In Table 1 the value for f at $D = 16$ and $N = 512$ is $f = 0.327$ rather than the mistyped value of 0.917.

For completeness we give below the values of the mean squared gyration radii R_{gb} of single unperturbed polymer chains of length N which were used in our simulations (A. Milchev, K. Binder, Eur. Phys. J. B **3**, 477 (1998)).

N	32	64	128	256	512
R_{gb}^2	6.31	14.59	34.74	78.44	178.3

When replotted versus the correct ratio D/R_{gb} , Figure 4 reveals a better agreement with the predicted scaling behavior of $Df \propto \left(\frac{D}{R_{gb}}\right)^{-\frac{1}{\nu}}$.

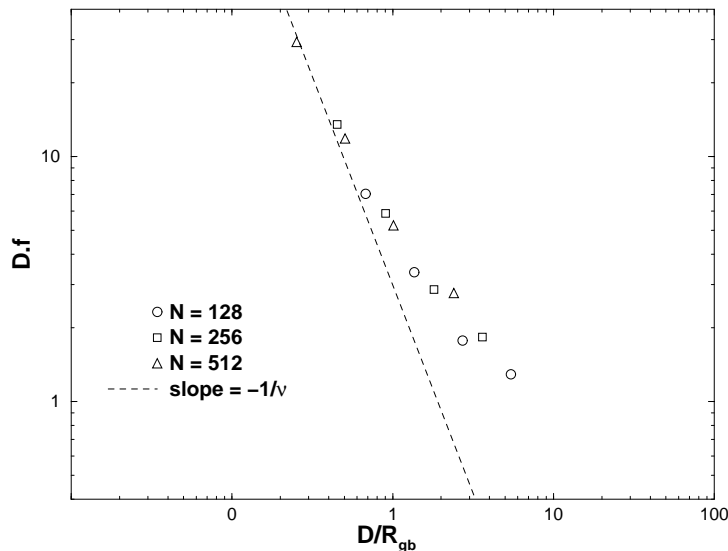


Fig. 4. Scaling plot for the force, Df versus D/R_{gb} . The dashed straight line indicates the slope that the scaling function should exhibit for small D/R_{gb} .

^a e-mail: milchev@plato.physik.uni-mainz.de^b e-mail: binder@chaplin.physik.uni-mainz.de