

Comment on 'A lattice model of uniform star polymers'

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1987 J. Phys. A: Math. Gen. 20 2233

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COMMENT

Comment on 'A lattice model of uniform star polymers'

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Received 10 February 1986

Abstract. Additional terms are reported for the series of star branched polymers.

Very recently, Lipson *et al* (1985) have presented a series enumeration study of star branched polymers. I have extended several of their series by one term (one series by two terms) in an attempt to permit a more accurate analysis of the series data. Unfortunately, this new series information appears to be primarily of academic interest, as the new terms do not alter the exponent estimates given in Lipson *et al*. Possibly the only modification is in the extrapolation of $\gamma(3)$ (in the notation of Lipson *et al*) in two dimensions. Based on data from the triangular lattice, a slightly tighter error bar for this exponent is reasonable.

In the notation of Lipson *et al*, the new series coefficients are as follows.

(i) *Uniform stars*

<i>SQ</i>	$f=3$	$n=8$	3	302	751	860
<i>T</i>	$f=3$	$n=6$	35	950	993	968
<i>SQ</i>	$f=4$	$n=7$	5	832	339	525
<i>T</i>	$f=4$	$n=5$	38	949	763	260
<i>T</i>	$f=5$	$n=4$	1	005	618	042
<i>T</i>	$f=6$	$n=4$	2	339	107	966

(ii) *Quasi-uniform stars*

<i>SQ</i>	$f=3$	$(n, n, n+1)$	$n=7$	1	407	542	164
			$n=8$	26	226	344	652
		$(n, n+1, n+1)$	$n=7$	3	746	171	724.

Reference

Lipson J E G, Whittington S G, Wilkinson M K, Martin J L and Gaunt D S 1985 *J. Phys. A: Math. Gen.* **18** L469