Meeting: 1004, Bowling Green, Kentucky, SS 4A, Special Session on Knot Theory and Its Applications

1004-57-110 Akos Dobay, Kenneth C Millett, Michael Piatek and Eric J Rawdon*
(rawdon@mathcs.duq.edu), Department of Math/CS, Duquesne University, Pittsburgh, PA 15282, and Andrzej Stasiak. Equilibrium Lengths of Random Equilateral Knots. Preliminary report.
We present computer simulations to examine the equilibrium length of random equilateral knots. The equilibrium length is computed with respect to statistical quantities such average crossing number and squared mean radius of gyration as well as spatial quantities such as the radius of a smallest ball and the dimensions of a smallest box containing the knots. (Received January 20, 2005)

