1056-05-690Shanzhen Gao* (sgao2@fau.edu), Department of Mathematics, Florida Atlantic University, 777Galdes Road, Boca Raton, FL 33431. Some Remarks On Self-Avoiding Walks.

A self-avoiding walk (SAW) is a sequence of moves on a lattice which does not visit the same point more than once. A SAW is interesting for simulations because its properties cannot be calculated analytically. Calculating the number of self-avoiding walks in any given lattice is a common computational problem. We will present some interesting problems involving prudent self-avoiding walks and pattern avoiding, and show how to solve a few of them. (Received September 15, 2009)