
FARID GASSOUMOV, York University

Osmotic Pressure of Confined Square Lattice Self-Avoiding Walks

Flory-Huggins theory is a mean field theory for modelling the free energy of dense polymer solutions and polymer melts. In this poster presentation, we use the Flory-Huggins theory as a model of a dense two-dimensional self-avoiding walk confined to a square in the square lattice. The theory described the free energy of the walk well, and we estimate the Flory interaction parameter of the walk $\chi = 0.32$