On bounds for minimum step number of knots in the simple cubic lattice

Koya Shimokawa (Saitama University)

Knots appear in DNA as well as in proteins. The number of monomers needed to construct such a knot is an important parameter. We address this problem by considering, both analytically and numerically, minimum step number of knots in the simple cubic lattice. This is a joint work with R. Scharein, K. Ishihara, J. Arsuaga, Y. Diao and M. Vazquez.