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Christine Soteris* (soteris@math.usask.ca), 106 Wiggins Road, Saskatoon, SK S7N 5E6, Canada. *Statistics and physics of knots in lattice tubes*. Preliminary report.

Self-avoiding polygons on the simple cubic lattice are the standard statistical mechanics lattice model for ring polymers in dilute solution. A standard model for studying the effects of geometrical confinement on ring polymers is to constrain the self-avoiding polygons to lie in an infinite rectangular lattice tube. In this talk I will review both theoretical and exact enumeration results regarding the knot complexity of compressed and stretched polygons in a lattice tube. (Received February 10, 2014)