1139-92-535   **Chris Soteros***, 106 Wiggins Road, Saskatoon, SK S7N 5E6, Canada. *Knot and link statistics for lattice models of biopolymers in tubes and nanochannels.* Preliminary report.

Motivated in part by experimental studies of DNA in viral capsids or in nanochannels, there is interest in understanding and characterizing the entanglement complexity of confined polymers. For this, we have been studying systems of self-avoiding polygons in lattice tubes using transfer-matrix methods and Monte Carlo computer simulations. In this talk I will review results on knotting statistics as a function of polygon length and tube size as well as recent results about the likelihood of "non-local" knotted patterns in tubes versus "local" knotted patterns. I will also discuss preliminary exact transfer matrix and Monte Carlo results about linking probabilities. (Received February 19, 2018)