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enzo orlandini* (orlandini@pd.infn.it), Department of Physics, University of Padova, via marzolo 8, I-31121 Padova, Italy, **Buks Janse van Rensburg**, Department of Mathematics and statistics, Yo, Toronto, M3J 1P3, Canada, **Maria Carla Tesi** (tesi@dm.unibo.it), Dipartimento di Matematica, Universita' di Bo, bologna, Italy, and **Stu Whittington**, Department of Chemistry, University of Toront, Toronto, M5S 3H6, Canada. *Knotting probability for models of stretched polymers*. Preliminary report.

We present numerical and rigorous results on the equilibrium properties and the knotting probability of polymers in presence of an external force f . The models considered are self-avoiding walks and polygons on the simple cubic lattice. We show that for positive (elongational) forces the knotting probability, at fixed number of edges n , is a decreasing function of f . Moreover, by generalizing the Sumners- Whittington theorem for unweighted polygons we show rigorously that, for fixed positive forces, the knotting probability approaches unity exponentially fast. (Received August 12, 2008)