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Abhijit Champanerkar* (abhijit@math.csi.cuny.edu), Department of Mathematics, College of Staten Island, CUNY, 2800 Victory Blvd, Staten Island, NY 10314, and **Ilya Kofman** and **Jessica Purcell**. *Geometrically maximal knots*.

We present new results and conjectures about geometrically maximal sequences of knots, which maximize hyperbolic volume per crossing in the limit. A weaving knot is an alternating knot with the same projection as a torus knot. We prove that weaving knots are geometrically maximal by providing asymptotically correct lower volume bounds, and show that the infinite alternating square lattice weave is their geometric limit. We will discuss a result, known to I. Agol, about generating families of geometrically maximal knots. (Received January 26, 2014)