

1153-54-489

Kathleen Hake* (khake@carleton.edu), 1 N College Street, Center for Mathematics and Computing, Northfield, MN 55057. *On the Thickness of Knotted Polygons*. Preliminary report.

For an integer $n \geq 3$, the collection of n -sided polygons embedded in 3-space defines the space of geometric knots. We will consider the subspace of equilateral knots, consisting of embedded n -sided polygons with unit length edges. We are interested in questions motivated by physical restrictions, in particular the thickness or ropelength of a knot. We will discuss the thickness of a polygonal knot and the existence of a maximally thick symmetric knotted equilateral hexagon. (Received September 03, 2019)