

1145-52-2661

Kyle Leland Chapman* (kyle.chapman.topology@gmail.com), Athens, GA 30605. *A Division of the Space of Knots, 3D Equilateral Polygons, into Isometric Simplexes.*

There is a nice geometric space, together with a toric-symplectic structure, which acts as a coordinate system for equilateral polygons. This geometric space provides a nice way of sampling, as well as rigorous analysis of certain properties of knots. I show a subdivision of this convex polytope into isometric simplexes, as well as a way of interpreting some of the known results, and generating geometric knots in amortized $O(n)$ time. (Received September 25, 2018)