1142-51-112 **Kyle Leland Chapman*** (kyle.chapman.topology@gmail.com). Decomposing Knot Space: a natural simplicial decomposition of equilateral PL-curves.

The space of equilateral PL-curves is relevant to the study of geometric knot theory. I present a decomposition into simplexes which are all isometric, making the space identifiable with the finite set product a single simplex. This decomposition is indexable in a way that makes the generating of such curves quite rapid, and which cooperates nicely with integer radius constraints and either being open or closed. (Received August 31, 2018)