Kyle Leland Chapman* (kyle.chapman.topology@gmail.com). Randomly Generating Self Avoiding Polygons Off Lattice.

We go through a method for generating off lattice polygons which account for the thickness of the polygonal fiber being modeled. We will start by outlining what can be done when we ignore the thickness constraint, using methods of symplectic geometry. We will then show a method for accounting for the thickness during the generation process. Finally, we will go through some of the resulting data about generation times and the resulting impacts of thickness. (Received August 28, 2016)