

1125-VU-1704 **Allison Henrich, Elsa Magness and Kayla Perez*** (perkay05@evergreen.edu), The Evergreen State College, QuaSR Center, 2700 Evergreen Parkway NW, Olympia, WA 98505, and **Briana Zimmer**. *Knot Fertility and Lineage*. Preliminary report.

Is your favorite knot fertile? We define a knot K to be a parent knot of a knot H if some number of crossings in a minimal crossing projection of K can be resolved to produce a diagram of H . We say that K is fertile if it is a parent knot of every knot with a smaller crossing number than itself. In this talk, we will explore families of knots and their relative fertility. We also explore ways to find the trefoil in every knot. (Received September 18, 2016)