

1135-VU-1882 **Brandon Q Tran*** (tran2833@stthomas.edu). *Classifying composite links*. Preliminary report. Mathematical links are appearing in science literature with increasing frequency (for example, proteins). Meanwhile, most mathematical analysis of entanglement, and computational tools to study entanglement, are focused on knotting. Our goal is to create a software chain that can classify link types in diagrams with up to 10 crossings.

While prime links have been classified through 11 crossings, there has been no systematic study of composite links (to the best of our knowledge). We know, to some extent, what all of the composite links should be. However, composing links is more complicated than composing knots, e.g. one needs to specify which components are to be composed.

Cantarella et al. have generated all link diagrams (and knot diagrams too) through 10 crossings. In this talk, we summarize our efforts to compute the link types of these diagrams, the most challenging of which are the composite link types. (Received September 25, 2017)