

For any thrackle we can create a graph where the vertices represent the curve sets and there is an edge between the vertices if the two curve sets intersect. For example:

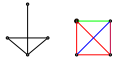


Figure 1: A thrackle and its reverse graph color indicated W' points

since over curves set must intersect exactly once the ending reverse graph will be the complete graph on m vertices, K^m .
The intersection of curves sets is a symmetric relation and so any W' point will be a sub-complete graph. Therefore the decomposition of the complete graph into sub-graphs is the number of W' points which has to be larger than thus m .



Figure 2: Examples of tight thrackles for Conjecture 0.1

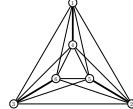
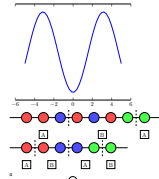
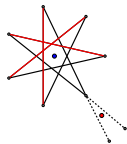
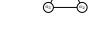
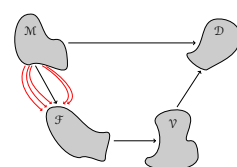
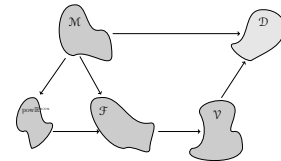


Figure 3: Example graphs made with this.



$$\begin{aligned} \sigma &\in \Sigma \\ K_{\sigma}(\sigma) &\subseteq \mathbb{R}^{n+1} \xrightarrow{\sigma} F(\sigma) \\ &= u_1(K_{\sigma}(\sigma)) \\ &= (u_1 \circ K_{\sigma})(\sigma) \end{aligned}$$

$$\begin{aligned} M &\xrightarrow{\sigma} F \\ K_{\sigma} &\xrightarrow{\sigma} F \\ \text{proj}(\mathbb{R}^{n+1}) &\xrightarrow{\sigma} F \end{aligned}$$



$\mathbb{R}^n \times \mathbb{R}^n \times \mathbb{R}^n$