

1116-57-1380

Elaina K Aceves* (ekaceves@mail.fresnostate.edu). *A Study of Bouquet Pseudograph Diagrams*. Preliminary report.

Spatial graph theory is a subfield of knot theory that focuses on the embeddings of graphs in three-dimensional space. When we observe a (spatial) graph diagram in the plane and two arcs of the diagram overlap, we have a crossing. We can distinguish between which strand lies over or under the other when we construct the crossing in the diagram. If we have no information at the crossing, we denote this as a precrossing. Pseudograph diagrams are graph diagrams that contain precrossings. The trivializing number (and knotting number, respectively) of a pseudograph diagram is the number of precrossings that need to be changed to a crossing to represent a trivial graph (and a nontrivial graph, respectively) regardless of how the remaining precrossings are resolved. This talk will focus on the trivializing and knotting number for bouquet pseudograph diagrams based on the number of precrossings and the placement of the precrossings in the pseudograph diagram. (Received September 19, 2015)