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Lattice structure of Grassmann-Tamari orders

The Tamari order is a poset of bracketings whose covering relations are given by a left-to-right associativity law. Many nice properties of the Tamari order may be deduced using a well-studied map from permutations to bracketings. Recently, Santos, Stump, and Welker introduced the Grassmann-Tamari order, a poset of maximal nonkissing collections of paths in a rectangle. Generalizing the map from permutations to bracketings, we will define a map from a family of biclosed sets to the facets of the nonkissing complex. Using this map, we can show that the Grassmann-Tamari order is a congruence-uniform lattice.