1145-57-2117 Cory Glover* (cory.s.glover@gmail.com), Mark Hughes, Leslie Colton and Samantha Sandberg. Representing knot types by elements of a symmetric group.

Petal projections are defined as a special class of knot projection with a single multi-crossing (called an uber-crossing), which causes the formation of loops entering and exiting the crossing. Petal projections can be described by elements in a symmetric group, called petal words, which describe the permutation of the strands as they pass through the uber-crossing. In this talk, I will discuss the symmetric group action on the set of petal words, and define a complete set of moves which is sufficient to relate any two petal words which represent the same knot type. (Received September 24, 2018)