Erica Flapan (eflapan@pomona.edu), Emille D. Lawrence (edlawrence@usfca.edu) and Robin T. Wilson* (robinwilson@cpp.edu). The Topological Symmetry Groups of the Heawood Graph.

Although, motivated by chemistry, spatial graph theory has now become a subfield of low-dimensional topology closely related to knot theory. In particular, the study of topological symmetry groups of graphs embedded in $S^3$ can be thought of as a generalization of the study of symmetries of knots and links. In this talk we are interested in the relationship between the automorphisms of a graph and the homeomorphisms of the embeddings of the graph in space. The subgroup of the automorphism group of an embedded graph induced by homeomorphisms of $S^3$ is called the topological symmetry group of that embedding. We will discuss recent results classifying groups that can occur as the topological symmetry group of some embedding of the Heawood graph in $S^3$. (Received September 03, 2019)