## 1023-20-1518Daniel S Farley\* (farleyds@muohio.edu), Miami University of Ohio, 239 Bachelor Hall, Oxford,<br/>OH 45056, and Lucas Sabalka. Graph Braid Groups.

Let  $\Gamma$  be a finite graph. The *n*-point configuration space of  $\Gamma$  is the topological space consisting of *n*-element subsets of  $\Gamma$ . The braid group of  $\Gamma$  is the fundamental group of this configuration space. Braid groups of graphs are thus analogous to the classical braid groups defined by Artin, but with a graph replacing the two-dimensional disk.

I will survey some joint work with Lucas Sabalka, in which we compute presentations, homology groups, and cohomology rings of graph braid groups. Our strongest results are for the case in which the graph is a tree. As a corollary of our work, we are able to show that most graph braid groups are not right-angled Artin groups, which answers a question posed by Ghrist. (Received September 26, 2006)