Coxeter mapping classes.

From a Coxeter graph it is possible to define a mapping class on a compact oriented surface whose homological action is conjugate to the Coxeter element of the Coxeter system. This holds not only for classical (simply-laced) Coxeter graphs, but also for Coxeter graphs with sign-labeled vertices. In this talk, we survey some ways that Coxeter mapping classes have been used to produce interesting examples of periodic and "nearly-periodic" pseudo-Anosov mapping classes. (Received July 19, 2016)