Jen Paulhus* (paulhus@math.grinnell.edu). A database of group actions on Riemann surfaces.

The automorphism group $G$ of a Riemann surface $X$ and the monodromy of the corresponding branched cover $X \to X/G$ are useful in studying subgroups of the mapping class group, attacking inverse Galois theory questions, and decomposing Jacobian varieties. Various mathematicians have created code to generate such groups and monodromy for relatively low genus. We discuss work done to unify this data, add additional information, and make it broadly accessible on the L-functions and Modular Forms Database. (Received September 16, 2019)