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Eilidh McKemmie*, mckemmie@usc.edu. *Invariable generation of finite classical groups*. Preliminary report.

We say a group is invariably generated by a set of elements if any conjugates of those elements generates the group. Eberhard, Ford and Green built upon the work of many others and showed that, as $n \rightarrow \infty$, the probability that S_n is invariably generated by a random set of elements is positive if there are four random elements, but goes to zero if we pick three random elements. This result gives rise to a nice Monte Carlo algorithm for computing Galois groups of polynomials. We will extend this result for S_n to the finite classical groups using the correspondence between classes of maximal tori of classical groups and conjugacy classes of their Weyl groups. (Received July 03, 2018)