

1096-03-1937

Cameron E. Freer* (freer@mit.edu). *Random symmetric constructions via inverse limits of finite structures.*

Building on recent results, we provide a method for constructing measures, concentrated on certain classes of countably infinite structures, that are invariant under arbitrary permutations of the underlying set that fix all elements instantiating constant symbols. We use this construction to obtain invariant probability measures concentrated on the class of countable models of certain first-order theories, including measures that do not assign positive probability to the isomorphism class of any single model. We also characterize those transitive Borel G -spaces admitting a G -invariant probability measure, when G is an arbitrary countable product of symmetric groups on a countable set.

Joint work with Nate Ackerman, Jaroslav Nešetřil, and Rehana Patel. (Received September 16, 2013)