1176-37-110 **Aimee Johnson***, Department of Mathematics and Statistics, 500 College Ave., Swarthmore, PA 19081. *Topological Speedups of Higher Dimensional Actions.*

Speedups of measurable dynamical systems have been studied since the 1969 work of Neveu, where he related the entropy of the speedup function to the original, and continued in a 1985 paper of Arnoux, Ornstein, and Weiss where they showed that given any two ergodic automorphisms, there is a speed up of one that is measurably conjugate to the other. The investigation into the topological setting for speedups is more recent, begun in the 2016 work of Ash, where he demonstrated the relationship between topological speedups and a unital ordered dimension group associated to the systems.

In this talk, I will discuss speedups of topological dynamical systems with higher dimensional actions, investigating how they are similar to, or different from, the single transformation scenario. This is joint work with David McClendon. (Received January 17, 2022)