1120-37-201 **Drew D. Ash*** (drew.ash@du.edu), Lori Alvin and Nic Ormes. Bounded topological speedups and entropy.

Given a dynamical system (X,T) one can define a speedup of (X,T) as another dynamical system $S: X \to X$ where $S = T^{p(\cdot)}$ for some $p: X \to \mathbb{Z}^+$. In 1985, Arnoux, Ornstein, and Weiss showed that any aperiodic, not necessarily ergodic, measure preserving systems is isomorphic to a speedup of any ergodic measure preserving system. In 2015, the speaker gave necessary and sufficient conditions for a minimal Cantor system to be a topological speedup of another minimal Cantor system. The form of this theorem mirrors that of Giordano, Putnam, and Skau's characterization of orbit equivalence of minimal Cantor systems. In this talk, we will discuss this result and recent joint work with Lori Alvin and Nic Ormes on bounded topological speedups. In particular, we will focus on entropy of speedups, and give a topological analogue of Neveu's entropy result for measure theoretic speedups. (Received February 23, 2016)