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Alfredo R Dolich* (alfredo.dolich@kbcc.cuny.edu), Dept. of Mathematics, The Graduate Center, 365 5th Ave., New York, NY 10016. *Generic Functions over Divisible Ordered Abelian Groups.*

Let T be the theory of divisible ordered Abelian groups given in a language \mathcal{L} and let σ be a new function symbol. We may consider the $\mathcal{L} \cup \{\sigma\}$ -theory, T_0 , given by the axioms for T together with the axioms stating that “ σ is an automorphism”. It is well known that T_0 does not have a model companion and as such we can not find a theory of “generic” automorphisms of divisible ordered Abelian groups. In this talk I will consider what happens if we weaken the requirements on σ . In particular I will consider the theory, T_1 , given by the axioms for T together with “ σ is a linear bijection”. T_1 has a model companion which we can consider as giving the theory of “generic” linear automorphisms over divisible ordered Abelian groups. The theory T_1 has a host of interesting properties which I will discuss. (Received January 22, 2017)