

962-03-864

Michael C. Laskowski* (mc1@math.umd.edu), Department of Mathematics, University of Maryland, College Park, MD. *Finding groups in models of stable, unsuperstable theories.*
Preliminary report.

If one restricts attention to the class of sufficiently saturated models, much of Shelah's analysis of models of classifiable theories can be generalized to arbitrary stable theories. In particular, generalizations of 'deep' and 'DOP' are well-behaved in this restricted context. The main new result is that every stable, unsuperstable theory that is shallow and has NDOP (in this generalized context) interprets a group. We will discuss the proof of this result and indicate applications involving Karp complexity and the Main Gap for \aleph_1 -saturated models of stable theories. (Received September 28, 2000)