Countable elementary extensions

Predrag Tanović Mathematical Institute SANU, Belgrade Serbia

Fix a countable first-order structure M. We say that two elementary extensions of M are isomorphic over M, if there is an isomorphism fixing M pointwise. Pillay conjectured that the number of (nonisomorphic) countable extensions is always infinite. We shall discuss the possible proof and related problems on minimal structures. (A first-order structure is minimal if its definable subsets ,with parameters, are exactly finite and co-finite subsets).