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*Categoricity Proofs*

Over 40 years ago, Morley proved that a first order theory which is categorical (has only one model) in one uncountable cardinality is categorical in all uncountable cardinalities. The theory of the complex field is the prototypical example of this situation. Morley's theorem spawned modern model theory; applications have included results in arithmetic algebraic geometry. Zilber now conjectures an analogous, but no longer first order, categorical axiomatization for the complex field with exponentiation; a first order approach is impossible. There are now several approaches to proving categoricity theorems. Some focus on the existence of a dimension governing the models just as in the case of algebraically closed fields. Others focus on the transfer of 'saturation'. Some have an 'upwards transfer' and a 'downwards transfer' component; others have only one step. We will compare and contrast several of the proofs (for both first order and analogous results in infinitary logic). Such an analysis of proof techniques may shed light both the nature of connections with geometry/algebra and on the distinctions between different logics.