

# CATEGORICITY IN INFINITE QUANTIFIER THEORIES

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Morley's categoricity theorem states that a countable first-order theory categorical in some uncountable cardinal is categorical in all uncountable cardinals. Shelah's categoricity conjecture states that a similar eventual categoricity behavior holds for certain infinitary theories in finite quantifier languages. In this talk we will explain the main ideas of a work in progress aiming at a version of eventual categoricity for theories in infinite quantifier languages. On the categorical side this corresponds to accessible categories, where the notion of internal size is taken instead of the cardinality of the underlying model. We will start motivating this with some examples computing the categoricity spectrum of infinite quantifier theories. Then we will study also to which extent the Generalized Continuum Hypothesis can be avoided through forcing techniques and how the use of large cardinals can replace model-theoretic assumptions like directed colimits or amalgamation. Our ultimate goal is to determine whether large cardinals are really needed for these latter assumptions or whether they just follow instead from categoricity.