The classification problem for amenable C^* -algebras

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Abstract

A brief survey is given of work on the classification of separable amenable (= nuclear) C^* -algebras. This began with the classification of UHF algebras by Glimm and AF (approximately finite-dimensional) algebras by Bratteli— unless one counts the result of Gelfand and Naimark on commutative algebras—and perhaps one should, because the first invariant to look at in the non-simple, non-commutative case is the spectrum. The other invariants that have been studied so far are, roughly speaking, K-theoretical, and it is an interesting question whether such invariants, if one includes enough of them, are enough.

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