Shelah's Easy Black Box

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Shelah's Black Box is a combinatorial principle that allows us to partially predict a given map under specific cardinal conditions. Various variants of this principle have been successfully used to realize complicated algebraic constructions. Its main feature is the fact that it is provable in ZFC, since prediction of maps is normally the direct consequence of additional set-theoretic assumptions like Martin's Axiom or Jensen's Diamond Principle $\diamondsuit$. The Easy Black Box is the central principle behind every version of the Black Box. In this talk I will present this basic combinatorial principle of set theory and sketch some of its algebraic applications.