

- ▶ HENRY TOWNSNER, *Amalgamation and regularity*.

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The Szemerédi regularity lemma and its generalization, the hypergraph regularity lemma, are powerful tools in extremal graph theory. If, instead of working in large finite graphs, we pass to an ultraproduct model with a measure, various parameters drop out, and the regularity lemma essentially says that the type of almost every point in this ultraproduct model is *wide* (contains no definable sets of measure 0). Proofs which use the regularity lemma are then translated into arguments requiring amalgamation properties on these types. We will describe this relationship between the regularity lemma and amalgamation properties.