\blacktriangleright ILIJAS FARAH, Ultrapowers of operator algebras.

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The use of ultrapowers in the study of operator algebras can be traced back at least to 1954. In the recent years logic was applied to resolve some long-standing open problems about the structure of the ultrapowers of C^* -algebras and von Neumann algebras. In set theory, this progress led to the discovery of a new type of ultrafilter on \mathbb{N} . In model theory it precipitated a curious characterization of stable theories.

This is a joint work with N. Christopher Phillips and Juris Stepr \bar{a} ns and with Bradd Hart and David Sherman.