

FRESH SUBSETS OF MEASURABLE ULTRAPOWERS

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ABSTRACT. In my talk, I want to present recent results studying the closure and non-closure properties of measurable ultrapowers with respect to Hamkin's notion of *freshness*. These results show that the extent of these properties highly depends on the combinatorics of the underlying model of set theory. While a result of Sakai shows that it is possible to obtain ultrapowers with maximal closure properties by forcing over a model containing a strongly compact cardinal, it turns out that measurable ultrapowers of canonical inner models possess the minimal amount of closure properties. The proof of this result heavily makes use of the existence of various *square sequences* in these models. This is joint work with Sandra Müller (Vienna).

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