SOME RESULTS ON ULTRAPOWER CAPTURING

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Cummings showed some time ago that it is relatively consistent (from large cardinals) that there is a measurable cardinal κ with a normal measure U such that the ultrapower $\mathrm{Ult}(V, U)$ contains the whole powerset of κ^+, thus answering a question of Steel. He also showed that nontrivial large cardinal strength was necessary for this property to hold, but any potential direct implications about κ were left open. We answer this further question and show that it is relatively consistent that the least measurable cardinal has this capturing property. We will also discuss some local variants of capturing.

This is joint work with Radek Honzík.

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