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Property (a) ***and dominating families***

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Abstract: Generalizations of earlier negative results on Property (a) are proved and two questions on an (a)-version of Jones' Lemma are posed. We discuss these questions in the realm of locally compact spaces. Using dominating families of functions as a tool, we prove that under the assumptions "2^ω is regular" and "$2^\omega < 2^{\omega_1}$" the existence of a T_1 separable locally compact (a)-space with an uncountable closed discrete subset implies the existence of inner models with measurable cardinals. We also use cardinal invariants such as $\mathfrak{d}$ to prove results in the class of locally compact spaces that strengthen, in such class, the negative results mentioned above.

Keywords: property (a), dominating families, small cardinals, inner models of measurability
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