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On pseudocompactness and related notions in ZF

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Abstract: We study in ZF and in the class of T_1 spaces the web of implications/non-implications between the notions of pseudocompactness, light compactness, countable compactness and some of their ZFC equivalents.

Keywords: axiom of choice; countably compact; lightly compact topological space; pseudocompact topological space

AMS Subject Classification: 54D30, 03E25

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