

# Towards a Katona type proof for the 2-intersecting Erdős-Ko-Rado theorem\*

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## Abstract

We study the possibility of the existence of a Katona type proof for the Erdős-Ko-Rado theorem for 2- and 3-intersecting families of sets. An Erdős-Ko-Rado type theorem for 2-intersecting integer arithmetic progressions and a model theoretic argument show that such an approach works in the 2-intersecting case.

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