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Vector Spaces of Non-measurable Functions

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摘要

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Abstract We show that there exists an infinite dimensional vector space every non-zero element of which is a non-measurable function. Moreover, this vector space can be chosen to be closed and to have dimension β for any cardinality β . Some techniques involving measure theory and density characters of Banach spaces are used.

Key words [lineability](#) [spaceability](#) [non-measurable functions](#) [density character](#)

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