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A study of conditional spreading sequences

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ACCEPTED MANUSCRIPT

A STUDY OF CONDITIONAL SPREADING SEQUENCES

SPIROS A. ARGYROS, PAVLOS MOTAKIS, AND BÜNYAMIN SARI

Abstract. It is shown that every conditional spreading sequence can be decomposed into two well behaved parts, one being unconditional and the other being convex block homogeneous, i.e. equivalent to its convex block sequences. This decomposition is then used to prove several results concerning the structure of spaces with conditional spreading bases as well as results in the theory of conditional spreading models. Among other things, it is shown that the space $C(\omega^\omega)$ is universal for all spreading models, i.e., it admits all spreading sequences, both conditional and unconditional, as spreading models. Moreover, every conditional spreading sequence is generated as a spreading model by a sequence in a space that is quasi-reflexive of order one.

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