THE STRUCTURE OF $m$–ISOMETRIC WEIGHTED SHIFT OPERATORS

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Abstract. We obtain simple characterizations of unilateral and bilateral weighted shift operators that are $m$–isometric. We show that any such operator is a Hadamard product of $2$–isometries and $3$–isometries. We also study weighted shift operators whose powers are $m$–isometric.


Keywords and phrases: $m$–isometry, weighted shift operators, Hadamard product.

REFERENCES