



**POWER BOUNDED OPERATORS WITH ONE-DIMENSIONAL
PERIPHERAL SPECTRUM, SIMILAR
TO A CONTRACTION**

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Abstract

Ralph deLaubenfels showed that if T is a power-bounded linear operator in a Hilbert space with finite peripheral spectrum then it is similar to a contraction. In this paper, we extend this result by replacing the finite peripheral spectrum by a one-dimensional peripheral spectrum (infinite) and show that T is similar to a contraction.

Keywords and phrases: power bounded operators in Hilbert space, similarity to a contraction, peripheral spectrum.

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