



WEAKLY SUPERCYCLIC POWER BOUNDED OPERATORS OF CLASS C_1 .

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Abstract. There is no supercyclic power bounded operator of class C_1 . There exist, however, weakly l-sequentially supercyclic unitary operators. We show that if T is a weakly l-sequentially supercyclic power bounded operator of class C_1 , then it has an extension \widehat{T} which is a weakly l-sequentially supercyclic singular-continuous unitary (and \widehat{T} has a Rajchman scalar spectral measure whenever T is weakly stable). The above result implies $\sigma_P(T) = \sigma_P(T^*) = \emptyset$, and also that if a weakly l-sequentially supercyclic operator is similar to an isometry, then it is similar to a unitary operator.

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