Meeting: 1004, Bowling Green, Kentucky, SS 7A, Special Session on Semigroups of Operators and Applications

1004-46-263 Mark Hoffmann, Nigel Kalton and Tamara Kucherenko* (tamara@math.missouri.edu),

1000 Hospital Dr Apt 6A, Columbia, MO 65201. *R-bounded semigroups on* L_1 and C(K) spaces. It is shown that on certain Banach spaces, including C[0,1] and $L_1[0,1]$, there is no strongly continuous semigroup $(T_t)_{0 < t < 1}$ consisting of weakly compact operators such that $(T_t)_{0 < t < 1}$ is an R-bounded family. More general results concerning approximating sequences are included and some variants of R-boundedness are also discussed.

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