



Spectrum of (eventually) positive semigroups

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Introduction. It is well-known that the growth bound and spectral bound of the generator of a positive C_0 -semigroup on E coincide if $E = L^p(\Omega)$ for $p \in [1, \infty]$, $C(K)$ for a compact Hausdorff set K , or $C_0(\Omega)$ for a locally compact Hausdorff space Ω . However, the previously known proofs are quite technical in nature. Recently, Hendrik Vogt gave a much shorter proof of the result for L^p -spaces. Inspired by his ideas, we present a simple proof of the result for the spaces of continuous functions. In fact, the proof can also be adapted to the more general class of *eventually positive semigroups*. We use this as a motivation to look at some other spectral properties of eventual positivity.

References

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