

SPECTRAL PROPERTIES FOR BOUNDED OPERATORS ON LOCALLY CONVEX SPACES

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ABSTRACT. The aim of this presentation is the study of spectral properties of the class of quotient bounded operators and the class of universally bounded operators on a locally convex space.

For a quotient bounded operator T on a locally convex space X we introduce the spectral radius $r_p(T)$ and prove that the properties of spectral radius for a bounded operator on a Banach space are also true in this case. Moreover, for such operator we prove that $|\sigma(Q_p, T)| = r_p(T)$ and the

Newmann series $\sum_{n=0}^{\infty} \frac{T^n}{\lambda^{n+1}}$ converges to $R(\lambda, T)$, whenever $|\lambda| > r_p(T)$. For a universally bounded operator T on locally convex spaces X only can prove that $|\sigma(B_p, T)| \leq r(B_p, T)$.