

REGULAR SPECTRUM OF ELEMENTS IN TOPOLOGICAL ALGEBRAS

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ABSTRACT. Main properties of the regular (or extended) spectrum of elements in topological algebras (introduced by L. Waelbroeck and G. R. Allan for unital locally convex algebras) are presented. Descriptions of the relationship between the usual spectrum and the regular spectrum of elements in topological algebras with jointly continuous multiplication are given. It is shown that the usual spectrum and the regular spectrum of elements coincide for Hausdorff locally convex Waelbroeck algebras. Main properties of the disolvent map of elements in topological algebras are studied.

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