B. Aupetit, Sur les transformations qui conservent le spectre, Banach algebras '97 (Blaubeuren), de Gruyter, Berlin, (1998), 55–78.

Abstract

The first section of this paper is a general survey on a great number of results concerning the complex linear transformations, from a Banach algebra into another one, which preserve the spectrum. At the end, it includes a proof of a conjecture of L. A. Harris and R. V. Kadison concerning such transformations in the case of finite von Neumann algebras. The second section is devoted to the study of the additive transformations which preserve the spectrum. In the third section some results about the multiplicative transformations which preserve the spectrum are given.