

ISOMORPHISMS IN K -THEORY FOR CERTAIN NORMED ALGEBRAS AND THEIR CLOSURES

LOTHAR M. SCHMITT

*School of Computer Science and Engineering, The University of
Aizu, Aizu-Wakamatsu City, Fukushima Prefecture 965-8580, Japan*
E-mail: lothar@u-aizu.ac.jp

We present an approach to K -theory for certain normed algebras that is particularly algebraic in nature and uses the norm and other topological properties with the most possible restraint. This yields simplified and strengthened statements plus proofs of a number of theorems related to the cyclic 6-term exact sequence of K -theory. In addition, isomorphisms of K -groups for certain normed algebras A (whose unitalizations $A^{(1)}$ are closed together with all the matrix algebras over $A^{(1)}$ under inverses, or inverses and logarithms) and their closures $\bar{A}$ can be shown based upon the previously mentioned techniques. This presentation is based upon Remark 3.5 and other results in [Publ. RIMS, Kyoto, 27 (1991), p. 837].