

Structure of topological algebras and a lemma of Müldner

Mohamed Oudadess

Abstract

We redress a gap in Müldner's proof, concerning the structure of general complete topological algebras. We also examine the structure of locally A-F-normed ones. The results of Müldner are based on a lemma the proof of which is not valid. We exhibit errors and give a correct and simple proof. This is for general topological algebras. On the other hand, we introduce a subclass of the latter; the one of the so called locally A-F-normed algebras. For these, one can argue as in the now classical case of m-convex ones; and give a more precise statement.