Ludkowski, Sergey V.
Spectra and structures of non locally compact group algebras. (English) Zbl 1463.22004

Summary: General non locally compact group algebras are investigated. Ideals of non locally compact
group algebras are studied. The weak semi-simplicity of non locally compact group algebras under definite
conditions is proved. Theorems about existence of abundant families of spectral families generating group
algebras of non locally compact groups are given. Examples are described. Moreover, relations of group
algebras with homomorphisms and representations of non locally compact groups are studied.

MSC:

22B10 Structure of group algebras of LCA groups
43A15 \(L^p\)-spaces and other function spaces on groups, semigroups, etc.

Keywords:
topological group; compact group algebras; ideal; spectrum; dual group