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Abstracts of Short Communications and Posters

Section:

2. Algebra

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J-Generalized topological divisors of zero in topological Jordan algebras

By introducing the notion of generalized topological divisors of zero in a topological Jordan algebra ([1]) (short J-g. t. d. z.), we prove that a complex and complete locally multiplicatively convex algebra possesses J-g. t. d. z. or is isomorphic to $\forall$. The problem is still open for a topological Jordan algebra. Nevertheless, we obtain that a complex and complete J-division topological Jordan algebra A either possesses J-g. t. d. z. or is isomorphic to $\forall$. When A is a real algebra thus A either possesses J-g. t. d. z. or is quadratic, in this last case A can be of infinite dimentional which is an essential difference with the associative case ([2]).
([1]) N. El Yacoubi, Théorèmes de structure dalgèbres de Jordan topologiques ou bornologiques , à paraître dans Algebras, Groups and Geometries. Vol.15, 1998. ([2]) N. El Yacoubi and H. Kemmoun, J-diviseurs topologiques de zéro dans les algbres de Jordan p-normées unitaires , à paraître dans Periodica Mathematica Hungarica, 1998.
Reference : N. El Yacoubi and H. Kemmoun, article soumis pour publication.