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Algébres de Banach unitaires et semisimplicitè

Unitary elements of a norm-unital Banach algebra A are defined as those invertible elements u of A satisfying $||u|| = ||u^{-1}|| = 1$. By a unitary Banach algebra we mean a norm-unital Banach algebra A such that the convex hull of the set of its unitary elements is norm-dense in the closed unit ball of A. Examples of unitary Banach algebras are all unital C^* -algebras and the discrete group algebras $l_1(G)$ for every group G. In this talk we consider the problem of semisimplicity of a unitary Banach algebra and the existence, over them, of an involution algebra mapping each unitary element to its inverse.

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