

M. Bendaoud, A. Bourhim, M. Burgos and M. Sarih, **Linear maps preserving Fredholm and Atkinson elements of  $C^*$ -algebras**, *Linear and Multilinear Algebra*, to appear.

**Abstract**

Let  $A$  be a unital  $C^*$ -algebra of real rank zero and  $B$  be a unital semisimple complex Banach algebra. We characterize linear maps from  $A$  onto  $B$  preserving different essential spectral sets and quantities such as the (left, right) essential spectrum, the Weyl spectrum, the index, and the essential spectral radius.