On weakly Radon-Nikodým compact spaces

Gonzalo Martínez Cervantes

Abstract

A compact space is said to be weakly Radon-Nikodým if it is homeomorphic to a weak*-compact subset of the dual of a Banach space not containing an isomorphic copy of ℓ_1 . We study some topological properties of this class of compact spaces and, in particular, we prove that it is not stable under continuous images. Moreover, we define a superclass of the continuous images of weakly Radon-Nikodým compacta and study its relation with other classes of compact spaces.

This work is supported by the research project 19275/PI/14 funded by Fundación Séneca - Agencia de Ciencia y Tecnología de la Región de Murcia within the framework of PCTIRM 2011-2014. This work is also supported by Ministerio de Economía y Competitividad (project MTM2014-54182-P).