MEHMET ORHON, Mathematics and Statistics Dept., University of New Hampshire Reflexivity of Banach C(K)-modules via the reflexivity of Banach lattices

It is well known that a Banach lattice is reflexive if and only if it does not contain any subspace isomorphic to l^1 or to c_0 (Lozanovskii). Let K be a compact Hausdorff space and let C(K) be the complex-valued continuous functions on K. Suppose X is a finitely generated Banach C(K)-module. We show that X is reflexive if and only if X does not contain any subspace isomorphic to l^1 or to c_0 . The proof uses Lozanovkii's Theorem. On the other hand, the well known James space provides an example that shows the hypothesis that X is finitely generated cannot be relaxed in general. (joint work with Arkady Kitover)