Bishop–Phelps–Bollobás property for positive operators

Abstract :

In this talk we prove that the pair $(C_0(L), Y)$

has the *Bishop–Phelps– property* for positive operators, for any locally compact Hausdorff topological space L, whenever Y is a *uniformly monotone Banach lattice* with a *weak unit*.

In the case where the space $C_0(L)$ is separable, the same statement holds for any uniformly monotone Banach lattice Y.

We also show the following partial converse of the main result. If Y is a *strictly monotone Banach lattice*, L is a *locally compact Hausdorff topological space* containing at least two elements, and the pair $(C_0(L), Y)$

has the *Bishop–Phelps– property* for positive operators, then Y is *uniformly monotone*.