Characterization of PF rings by the Finite Topology on duals of R Modules

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Abstract :   In this paper we study the properties of the finite topology on the dual of a module over an arbitrary ring. We aim to give conditions when certain properties of the field case can still be found here. Investigating the correspondence between the closed submodules of the dual M^* of a module M and the submodules of M, we prove some characterizations of PF rings: the up stated correspondence is an anti isomorphism of lattices if and only if R is a PF ring.

Key words and phrases : PF rings, Finite Topology

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