

PRIMENESS IN CATEGORY OF MODULES AND CATEGORY OF COMODULES OVER CORINGS

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Abstract. We recall the notion of prime modules and use the analogue technique to define prime comodules and corings. Moreover, the related properties are of interest. We investigate the relation of primeness of C -comodule M and the dual algebra *C of a coring C , the relation to projectivity of a coring in the associated category, the implication of the primeness to the injective hull and product of prime coalgebras.

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