

On Primitive Ideals in Graded Rings

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Abstract. Let $R = \bigoplus_{i=1}^{\infty} R_i$ be a graded nil ring. It is shown that primitive ideals in R are homogeneous. Let $A = \bigoplus_{i=1}^{\infty} A_i$ be a graded non-PI just-infinite dimensional algebra and let I be a prime ideal in A . It is shown that either $I = \{0\}$ or $I = A$. Moreover, A is either primitive or Jacobson radical.

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