

The Structure Of Chain Rings

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Abstract

It is proved by Clark and Drake that a finite local ring R has a coefficient subring which is a Galois ring. Wirt gave the concept of a distinguished basis of a bimodule over a Galois ring. This distinguished basis is used by Wirt to prove that R is a quotient of some skew polynomial ring over its coefficient subring.

This thesis is attempt to generalize these results to rings that need not be finite nor commutative.