

1024-13-89

Jim Coykendall* (jim.coykendall@ndsu.edu), Department of Mathematics, North Dakota State University, Fargo, ND 58105-5075. *Generalizations of the Hilbert Basis Theorem.*

It is a classical result in commutative algebra that if R is Noetherian, then its polynomial and power series extensions ($R[x]$ and $R[[x]]$ respectively), are also Noetherian. This talk will consider the stability of a couple of “near-Noetherian” properties in polynomial and power series extensions. In particular, we will look at the stability of the (strong) finite-type property in $R[x]$ and $R[[x]]$. (Received January 02, 2007)