Jim Coykendall* (jim.coykendall@ndsu.edu), Department of Mathematics, North Dakota State University, Fargo, ND 58105-5075. Elements of domains with large factorizations.

This talk will compare and contrast domains containing elements with "large and small" numbers of factors. In particular we will look at the GD(1) property (a domain, R, is GD(1) if every nonzero element of R is contained in at most finitely many principal prime ideals), and IPD domains (domains containing elements with infinitely many non-associate prime divisors).

The behavior of the GD(1) property in various ring extensions will be explored and some of the properties of IPD domains will be investigated as well. The work with IPD domains is joint with Professor Tiberiu Dumitrescu. (Received August 23, 2005)