

Meeting: 1004, Bowling Green, Kentucky, SS 11A, Special Session on Commutative Ring Theory

1004-13-191 **Marco Fontana** and **Evan Houston*** (eghousto@email.uncc.edu), Dept. of Mathematics, Charlotte, NC 28223, and **Thomas G Lucas**. *Factoring ideals in Prüfer domains*. Preliminary report.

Let us say that a Prüfer domain R has the *factorization property* if each nonzero ideal of R has a factorization of the form $J\Pi$, where J is a divisorial ideal and Π is a (possibly empty) product of maximal ideals. It is known that h -local Prüfer domains possess this factorization property. We show that if R is a Prüfer domain of finite character with the factorization property, then R must be h -local; on the other hand, we show how to produce examples of non- h -local Prüfer domains which have the factorization property. (Received January 24, 2005)