Meeting: 1003, Atlanta, Georgia, SS 20A, AMS Special Session on Commutative Algebra, I

1003-13-683 Phillip A. Griffith\* (griffith@math.uiuc.edu), 1409 W. Green St., Urbana, IL 61801. Extending Coherent Sheaves from Open Subschemes. Preliminary report.

Let R and S be local normal domains such that S/tS = R and let b denote an ideal in S with  $t \in b$  such that a = b/(t)has codim  $\geq 2$  in R. If  $R \hookrightarrow A$  is a finite generically Galois extension, I will discuss the problem of extending the coherent  $\mathcal{O}_X$ -algebra  $\tilde{A}$  from the open subscheme X = Spec R - V(a) to a normal  $\mathcal{O}_Y$ -algebra, where Y = Spec S - V(b). (Received September 27, 2004)