

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

1004-13-8            **Steve McAdam\*** ([mcadam@math.utexas.edu](mailto:mcadam@math.utexas.edu)), University of Texas at Austin, Department of Mathematics, 1 University Station C1200, Austin, TX 78712-0257. *Realizing sets of prime divisors*. Preliminary report.

Let  $R$  be a Noetherian ring and let  $S$  be a finite subset of  $\text{Spec } R$ . A result in Zariski-Samuel shows if no height 0 prime ideal is contained in  $S$ , then there is an ideal  $I$  whose associated prime divisors comprise exactly  $S$ . However, that result is far from complete. We characterize exactly when such an  $I$  exists. As a corollary, we show that if no isolated primary component of 0 is prime, then such an  $I$  exists for any choice of finite  $S$ . (Received October 28, 2004)