1083-13-145 **Christopher A. Francisco**, **Jeffrey Mermin** and **Jay Schweig***, jay.schweig@okstate.edu.
Poset-Borel Ideals.

A monomial ideal I in $S = k[x_1, \ldots, x_n]$ is *Borel* if $\frac{x_i}{x_j} m \in I$ whenever m is a monomial in I, x_j divides m, and $i < j$. If Q is a poset on $[n]$, we say a monomial ideal in S is *Q-Borel* if the above holds whenever $i < j$ in Q. Thus every monomial ideal is Q-Borel for some Q, and Borel ideals are C-Borel, where C is the n-element chain $1 < 2 < \cdots < n$. We examine principal Q-Borel ideals, and show how information about such ideals (such as their associated primes) may be gleaned from examining the structure of the associated poset. Finally, we give a minimal resolution of ideals which are "almost" Borel, in that they are Q-Borel for a poset very close to a chain. (Received August 26, 2012)