

1067-13-230

Christina L. Eubanks-Turner*, P.O. Box 41010, Lafayette, LA 70504, and **Serpil Saydam**
and **Melissa Luckas**. *Prime Ideals in Birational Extensions of Two-Dimensional Power Series*
Rings. Preliminary report.

In this talk we describe the *prime spectrum*, the set of prime ideals, for certain two-dimensional polynomial and power series rings. Our main result is the characterization of those partially ordered sets that arise as prime spectra of simple birational extensions of a power series ring in one indeterminate with coefficients in a countable infinite Dedekind domain that has infinitely many maximal ideals. (Received August 10, 2010)