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William Heinzer*, Dept. of Mathematics, Purdue University, 150 N. University St., West Lafayette, IN 47907, and **Christel Rotthaus** and **Sylvia Wiegand**. *Mixed Polynomial/Power Series Rings and Relations among their Spectra*.

Let x, y be indeterminates over a field k . We consider the nested mixed polynomial/power series rings

$$A := k[x, y] \hookrightarrow B := k[[y]][x] \hookrightarrow C := k[x][[y]] \hookrightarrow E := k[x, 1/x][[y]].$$

The above inclusion maps are all flat. We also consider

$$C \hookrightarrow D_1 := k[x][[y/x]] \hookrightarrow \cdots \hookrightarrow D_n := k[x][[y/x^n]] \hookrightarrow \cdots \hookrightarrow E.$$

We consider the analogous situation involving three indeterminates and examine the spectra of these rings. We say that an inclusion map $R \hookrightarrow S$ of integral domains is a trivial generic fiber (TGF) extension if each nonzero prime ideal of S contains a nonzero element of R . We examine the TGF property for mixed polynomial/power series rings. (Received August 11, 2005)