

**Meeting:** 1003, Atlanta, Georgia, SS 14A, AMS Special Session on D-Modules, I

1003-14-236      **Laura Felicia Matusevich\***, Department of Mathematics, University of Pennsylvania, 209 South 33rd Street, Philadelphia, PA 19104-6395, **Ezra Miller**, Department of Mathematics, University of Minnesota, and **Uli Walther**, Department of Mathematics, Purdue University. *Holonomic ranks in parametric families.*

I will discuss the behavior of the holonomic rank in a family of  $D$ -modules depending on parameters. As it turns out, rank is upper semicontinuous under mild hypotheses. Particular attention will be given to the case of  $A$ -hypergeometric  $D$ -modules, where much more detailed information can be obtained. (Received September 01, 2004)