

Meeting: 1002, Pittsburgh, Pennsylvania, SS 9A, Special Session on Multivariate Hypergeometric Functions: Combinatorial and Algebro-Geometric Aspects

1002-14-84 **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. *Ranks of A -hypergeometric systems.*

I will explicitly describe the locus of rank-jumping parameters for A -hypergeometric systems. In particular, this settles in the affirmative a conjecture of Sturmfels, that such parameters exist if and only if the underlying semigroup ring is Cohen–Macaulay. (Received September 01, 2004)