



**PURDUE UNIVERSITY**

**Department of Mathematics Colloquium**

Speaker: Professor Laura Matusevich, Texas A&M University  
Title: "Hypergeometric Equations and Algebraic Geometry"  
Date: Tuesday, September 25, 2007  
Time: 4:30 P.M.  
Place: MATH 175

**Abstract**

The systematic study of hypergeometric functions and differentialequations in one variable was originated by Euler and Gauss over two hundred years ago. The higher dimensional case also has a distinguished history. For instance, it is a theorem of Mellin that the roots of a polynomial are hypergeometric functions of its coefficients. It has been noted in the last 20 years that tools from algebraic geometry are relevant and useful in the study of hypergeometric equations; the goal of this talk is to illustrate this phenomenon. I will mention joint results with Alicia Dickenstein, Ezra Miller, Timur Sadykov and Uli Walther.

**Refreshments will be served in the Math Library Lounge, 4:00 P.M.**