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

1002-14-48 **H A Verrill*** (verrill@math.lsu.edu), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803-4918. *Picard-Fuchs differential equation for the A_n family of Calabi-Yau varieties.*

I will discuss the Picard-Fuchs equations for the families of varieties given by $(x_1+x_2+...+x_n)(a_1/x_1+....+a_n/x_n)t=1$ where t is a parameter, a_i are fixed, and x_i are homogenous coordinates. (This equation should be multiplied by $x_1...x_n$, and the resulting variety desingularized). Mostly I will talk about the combinatorics involved in finding the Picard-Fuchs equation (as in http://front.math.ucdavis.edu/math.CO/0407327). (Received July 23, 2004)