

Western
Algebraic
Geometry
Seminar

WAGS Fall 2004

Colorado State University

Speaker: Rick Miranda

Time: 9:00 am, Saturday October 9

Title: Matching conditions for degenerating plane curves

Abstract: Problems involving linear systems of curves on a surface, and in particular their dimension, can often be attacked via degeneration methods. When the surface is allowed to degenerate to two surfaces, one obtains in the limit two linear systems, one on each component. In order for such a composite system to be the limit of a system on the general surface, certain matching conditions must be imposed. These will be discussed, and applications to the Harbourne-Hirschowitz Conjecture and the Nagata Conjecture will be made.