

# Harvard-M.I.T. Algebraic Geometry Seminar

## LINEAR SYSTEMS OF PLANE CURVES THROUGH BASE POINTS OF BOUNDED MULTIPLICITIES

Stephanie Yang  
Harvard University

### Abstract:

Let  $\Gamma$  be a collection of multiple points in  $\mathbb{P}^2$ . A well-known conjecture of Harbourne and Hirshowitz gives geometric meaning to when the multiple points in  $\Gamma$  fail to impose independent conditions on plane curves of a given degree. I show that this conjecture is true if the multiplicities of the points of  $\Gamma$  are not greater than 6.

Tuesday, September 30th  
3:00 p.m.  
Harvard Rm 507

<http://www-math.mit.edu/~jstarr/03fsem/>.