Harvard-M.I.T. Algebraic Geometry Seminar

RATIONAL SIMPLE CONNECTEDNESS AND WEAK APPROXIMATION

JASON STARR
SUNY Stony Brook

This is joint work with A. J. de Jong. Rational simple connectedness is an algebraic analogue of simple connectedness, just as rational connectedness is an algebraic analogue of path connectedness. The problem of weak approximation is to approximate local points of a variety by global points of the variety. A theorem of Hassett relates rational simple connectedness to weak approximation in the geometric case (i.e., varieties defined over the function field of a curve). Using Hassett's theorem, de Jong and I prove weak approximation for "low degree" complete intersections (roughly dimension $>$ 2 times the square of the degree).

Tuesday, February 13th
3:00 p.m.
MIT Room 4-145

http://www-math.mit.edu/ags/