

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

## A MODULAR NON-RIGID CALABI-YAU THREEFOLD

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We construct a quintic Calabi-Yau threefold as the total space of a one-parameter family of abelian surfaces arising from the Horrocks-Mumford vector bundle. After resolving the singularities, the middle cohomology of the resulting threefold is shown to break up into a piece arising from a pair of embedded elliptic ruled surfaces and a two-dimensional piece corresponding to a modular form of weight 4.

Tuesday, February 22th, 2005  
3:00 p.m.  
Harvard Rm 507

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