

# Stanford Algebraic Geometry — Seminar —

## A NEW TORELLI THEOREM FOR CUBIC THREEFOLDS

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### Abstract

(joint with J. Carlson and D. Toledo) The moduli space of cubic hypersurfaces in  $\mathbb{P}^4$  is a quotient of the complex 10-ball by a certain discrete group; more precisely, it is isomorphic to a slight modification of the ball quotient. This result complements the Torelli theorem of Clemens and Griffiths, which maps the moduli space into a 15-dimensional locally symmetric variety. (The full paper is available as [math.AG/0608287](http://math.AG/0608287).)

Friday, October 13

3:15 p.m.

Room 383-N

<http://math.stanford.edu/ag/s0607/>