Kempner Colloquium

Geometry of Moduli Spaces and Geometric Invariant Theory

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The minimal model program for an algebraic variety is a sequence of steps that simplifies the geometry of the variety and culminates in the so-called canonical model. It was observed recently that the first several models in the minimal model program for the moduli space of curves are moduli spaces in their own right. Moreover, the construction of these moduli spaces proceeds via geometric invariant theory. We will survey these developments and discuss recent results on finite Hilbert stability of embedded varieties that reveal a whole menagerie of new moduli spaces of singular curves.

January 23, 2011
4:00 p.m.
MATH 350