

Harvard-M.I.T. Algebraic Geometry Seminar

MODULAR, LOG CANONICAL, AND TROPICAL COMPACTIFICATIONS

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The celebrated moduli space of curves of Grothendieck, Knudsen, and Mumford admits a straightforward generalization in all dimensions: the moduli space of stable pairs introduced by Kollár, Shepherd-Barron, and Alexeev. Their construction is not effective and relies on the Minimal Model Program. Using the classical example of a cubic surface with 27 lines, I'll describe joint work with Hacking and Keel where we construct the moduli space of stable Del Pezzo surfaces and describe its boundary using non-archimedean amoebas. This is one instance of the beautiful connection between the Mori theory and the “tropical geometry”.

Tuesday, February 14th

3:00 p.m.

MIT Room 2-190

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