

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

## LOG GEOMETRY AND MODULI SPACES

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The theory of log geometry in the sense of Fontaine and Illusie has in the last 15 years become an increasingly important tool in algebraic geometry and is used for example in arithmetic geometry, Hodge theory, and the theory of moduli.

In this talk I will review the basic definitions of log geometry and outline some applications to the study of moduli of curves and K3 surfaces. In particular, I will discuss how one can construct, using moduli of log K3 surfaces, Mumford's toroidal compactifications of period spaces for polarized K3 surfaces.

Tuesday, April 6th,  
3:00 p.m.  
Harvard Rm 507

<http://www-math.mit.edu/~jstarr/04sem/>.