COMPACTIFICATION OF K3 MODULI

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Zoom link:
https://bostonu.zoom.us/j/97456419902?pwd=Vk5hdGQ0dlgwTXZkZ1hRUHM0WndqZz09
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Abstract: By the Torelli theorem, the moduli space of lattice polarized K3 surfaces
is the quotient of a Hermitian symmetric domain by an arithmetic group. In this
capacity, it has compactifications such as the Baily-Borel and toroidal compactifica-
tions which depend on some choice of fan. On the other hand, choosing canonically
an ample divisor on every such K3, one can build a compactification via so-called
(KSBA) stable pairs. I will discuss joint work with V. Alexeev on how one proves
that the normalization of a stable pair compactification of K3 moduli is the toroidal
compactification for an appropriate choice of fan. We will focus on the example of
elliptic K3s, polarized by the section plus the sum of the singular fibers.

See http://math.bu.edu/research/geom/seminar.html or contact Yu-Shen Lin
(yslin@bu.edu) or Siu-Cheong Lau (lau@math.bu.edu) for more information.