COMPACTIFICATION OF K3 MODULI

Philip Engel
University of Georgia

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Zoom link:
https://bostonu.zoom.us/j/97456419902?pwd=Vk5hdGQ0dlgwTXZkZ1hRUHM0WndqZz09
Please email Yu-Shen Lin (yslin0221@gmail.com) for password

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 compactifications 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.