



Leibniz  
Universität  
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Oberseminar  
Institut für Algebraische Geometrie

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Compact moduli of K3 surfaces

Let  $F$  be a moduli space of lattice-polarized K3 surfaces. Suppose that one has chosen a canonical effective ample divisor  $R$  on a general K3 in  $F$ . We call this divisor *recognizable* if its flat limit on Kulikov surfaces is well defined. We prove that the normalization of the stable pair compactification  $F_R$  for a recognizable divisor is a Looijenga semitoroidal compactification. For polarized K3 surfaces  $(X, L)$  of degree  $2d$ , we show that the sum of rational curves in the linear system  $|L|$  is a recognizable divisor, giving a modular semitoroidal compactification of  $F_{2d}$  for all  $d$ . This is a joint work with Philip Engel.

Donnerstag, 17.06.2021

16:30 - 17:30

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Alle Interessierten sind herzlich eingeladen.