Seminar

Compact moduli of K3 and Enriques surfaces

by

Professor Philip ENGEL
University of Bonn

Abstract

Due to Torelli theorems, moduli spaces of surfaces of Kodaira dimension 0 are orthogonal Shimura varieties. In the 60's-80's, compactifications of such varieties were constructed by Baily-Borel, Ash-Mumford-Rapaport-Tai, and Looijenga. But are any of these "semitoroidal" compactifications distinguished, in the sense that they parameterize some "stable surfaces", like the Deligne-Mumford compactification for curves? Work on the Minimal Model Program from the 80's-00's by Kollar-Shepherd-Barron-Alexeev proved that an ample divisor on a Calabi-Yau variety defines a notion of stability, leading to compact moduli spaces. I will describe joint work with Alexeev, relating the Hodge-theoretic and MMP approaches to compactification, via the notion of a "recognizable divisor".

Date	:	**16 February 2024 (Friday)**
Time	:	**1:00pm – 2:00pm**
Venue	:	**Room 502a, Academic Building I**

All are Welcome