CENTRO DE MATEMÁTICA UNIVERSIDADE DO PORTO

GEOMETRY AND TOPOLOGY SEMINAR

Compact moduli of Enriques surfaces with a numerical polarization of degree 2 .

Daniel Zachary Garza

University of Georgia.

Abstract. In this talk, I will discuss recent joint work with Alexeev-Engel-Schaffler that provides explicit, combinatorial descriptions of stable degenerations of numerically polarized Enriques surfaces of degree 2.

We show that this can be identified with a semitoroidal compactification of the Hodge-theoretic period domain, leveraging Alexeev-Engel's seminal work on compactifications of moduli spaces of K_3 surfaces via integral-affine geometry. In this work, we generalize the classical theory of "folding" Dynkin diagrams and the induced involutions on integral affine spheres, and extend Alexeev-Thompson's theory of toric ADE surfaces to types B and C to classify boundary strata of the stable pair compactification.

FRIDAY, FEBRUARY 23TH **15H30** **ROOM: ONLINE**

FCT Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

With the support of UID/MAT/00144/2019