Seminar

Prof. Johanna Knapp

TU Vienna

(Non-)birational Calabi-Yaus from physics

Thursday, April 20, 2017

at 11:00 h

ESI, Boltzmann Lecture Hall

Abstract: The gauged linear sigma model (GLSM) is a gauge theory that can be used to study Calabi-Yaus and their Kaehler moduli spaces. GLSMs with non-abelian gauge groups have been shown to produce Calabi-Yaus which are not birationally equivalent. After giving the basic definitions of a GLSM we discuss several explicit examples. In particular we present a new pair of non-birational Calabi-Yau threefolds with Hodge numbers $h^{1,1} = 2$ and $h^{2,1} = 24$ that was constructed from a non-abelian GLSM in collaboration with K. Hori.

L. Katzarkov

April 13, 2017