

# Birational geometry via syzygies and interpolation of vector bundles

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Often, the study of the birational geometry of a moduli space is understood as a program. This program first aims to determine invariants such as the cones of effective, ample and movable divisors; or the Mori chamber decomposition.

In this talk, we will discuss the cone of effective and movable divisors of the Hilbert scheme of points on the plane. We propose an inductive method which determines such cones via syzygies in some cases. It is work in progress whether we can effectively compute the Mori chamber decomposition using this method.

This is joint work with Manuel Leal and Tim Ryan.