

NEF CONES OF HILBERT SCHEMES OF POINTS ON SURFACES VIA BRIDGELAND STABILITY CONDITIONS

BARBARA BOLOGNESE

ABSTRACT. Carrying out the Minimal Model Program for moduli spaces is a classical and extremely challenging problem. In this talk, we will deal with a particular moduli space, namely the Hilbert scheme of points on a surface with irregularity zero. After explaining the connection between the birational models of a variety and the combinatorics of its Nef cone, we will show how Bridgeland stability conditions are a powerful machinery to produce extremal rays in the Nef cone of the Hilbert scheme. Time permitting, we will give a complete description of the Nef cone in some examples of low Picard rank. The first hour will be introductory and suitable for graduate students.