CASTS TALKS

CASTS Algebraic Geometry Summer Program

Derived category and canonical bundle II

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2018 - 08 - 08 (Wed.) 10:00 - 11:00

103, Mathematics Research Center Building (ori. New Math. Bldg.)

This talk is a continuation of "Derived category and canonical bundle I". We will work over an algebraic closed field of characteristic zero and apply Orlov's existence theorem (5.14) with a few technical lemmas to obtain some results, finer than before, concerning various derived invariants such as (numerical) Kodaira dimension, canonical ring, nefness of canonical bundle, and Hochschild cohomology.

Our another task is to preliminarily clarify the relation between derived equivalence and birational equivalence, or D-equivalence and K-equivalence, which will be revisited after.

