

CASTS Algebraic Geometry Summer Program

The Riemann-Roch theorem and birational map

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2018 - 07 - 18 (Wed.)

10:00 - 11:00

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

This talk introduces the basic tools for the study of surfaces. First, we will give the definition of intersection form and briefly talk about its properties, based on which we deduce the Riemann-Roch theorem and the genus formula. In the talk, we will also cover the structure of birational maps, and show that every surface can be obtained by a finite number of blow-ups of a minimal surface. Finally, we will mention Castelnuovo's contractibility criterion, and give a sketch of proof if time permits.

