

CASTS Algebraic Geometry Summer Program

Castelnuovo's theorem and surfaces with zero geometric genus and $q > 0$

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2018 - 07 - 25 (Wed.)

10:00 - 11:00

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

This talk is part of the series of talks on Enriques' classification of complex algebraic surface. The aim of this talk is twofold: First, we study Castelnuovo's criterion of rational surfaces. Also, we introduce the Albanese variety and use the notion to show the uniqueness of the minimal model for non-ruled surfaces. Next, we give a complete classification of the surfaces with zero geometric genus and with irregularity not smaller than one; in particular, we give some characterization of ruled surfaces.

