CASTS TALKS

CASTS Algebraic Geometry Summer Program

K3 Surfaces and Local Torelli Theorem for K3

Mr. Kuan-Wen Chen

2018 - 08 - 02 (Thu.)
11:30 - 12:30
103, Mathematics Research Center Building (ori. New Math. Bldg.)

In the talk, we first compute some topological and analytical invariants for K3 surfaces. Next, we introduce the notion of Hodge isometry and show the global Torelli theorem for projective Kummer surfaces. Finally, we turn to the local Torelli theorem for general K3 surfaces, which says that the associated period map is a local isomorphism for Kuranishi family of K3 surfaces.