Student Geometry Seminar

國立清華大學數學系 學生幾何研討會

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講題 Moduli spaces and the Kuga-Satake construction

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地點 綜三 631

Abstract

A coarse moduli space is a parametrisation space of isomorphism classes of structured algebra-geometric objects. We will look at the coarse moduli spaces for two types of complex projective varieties: abelian varieties and lattice polarized K3 surfaces. By the Global Torelli Theorem, the parameters in these moduli spaces can be given by the Hodge structures on the cohomology groups of the varieties. By modifying the classical Kuga-Satake construction which takes a K3 surface to an abelian variety, there is a particular coincidence of the parametrisation space of some families lattice polarized K3 surfaces and that of some families of abelian varieties.

Find more information at **https://sites.google.com/view/sgsnthu/home**