

SPEAKER: Abhinav Kumar (MIT)

TITLE: K3 surfaces, Shioda-Inose structures, and real multiplication

ABSTRACT: In this talk, we will describe an explicit birational map between the moduli space of principally polarized abelian surfaces (or of genus 2 curves) and a certain 3-dimensional family of elliptic K3 surfaces, through the mechanism of Shioda-Inose structure. As an application, we will discuss parametrizations of some Hilbert modular surfaces, following Elkies.