



FUDAN-SCMS ALGEBRAIC GEOMETRY SEMINAR

ZOOM MEETING SEMINAR

LECTURE :

ISOGENIES BETWEEN K3 SURFACES

Speaker: Ziquan Yang (Harvard University)

Time: Dec 31, Beijing 10:00-11:00 (GMT 2:00-3:00)

Zoom Meeting Id: 663 288 42476

Password: 684951

Abstract: An isogeny between two K3 surfaces is an algebraic correspondence whose cohomological realization preserves the Poincare pairing. Isogenies between K3 surfaces behave in many ways like those between abelian varieties and have important applications to the cycle conjectures. I will start by reviewing the isogeny theory over the complex numbers, mostly due to Shafarevich, Mukai, Huybrechts, etc., and explain its relation to the global Torelli theorem. Then I will explain what is known in positive characteristics, based on my joint work with Dan Bragg.