Math 208 - Algebraic Geometry Seminar

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Brilliant families of K3 surfaces

Abstract:
We explain how Hodge theory unifies three a priori very different types of deformations of K3 surfaces: twistor spaces, Brauer (or Tate-Shafarevich) families and Dwork families. All three share the property of transporting complex multiplication from one fibre in the Noether-Lefschetz locus to any other. This phenomenon is at the moment observed in all three cases but geometrically only explained for Brauer families. The motivation comes from the Hodge conjecture for squares of K3 surfaces which is still open.

Special Note:
Pre-talk at 9:30 AM

Host: Elham Izadi

Friday, March 12, 2021
10:00 AM
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