

Student Algebraic Geometry Seminar

Organizer(s): Andrew Critch and Andrew Dudzik

Fridays, 4:00–5:00pm, 740 Evans

Fri, Mar 16 **Morgan Brown**, UC Berkeley

The Torelli Theorem for K3 surfaces.

The Torelli theorem for algebraic curves says that two smooth curves are isomorphic if and only if their Jacobians are. Likewise, the (weak) Torelli theorem for K3 surfaces says that two K3 surfaces X and X' are isomorphic if and only if there is a Hodge isometry $H^2(X, \mathbb{Z}) \rightarrow H^2(X', \mathbb{Z})$. I will present this theorem, and explore some of its consequences for the geometry of K3 surfaces.

After the seminar, everyone is invited out for drinks and dinner with the speaker.