Algebra
Seminar

Genus one curves in Severi-Brauer Varieties.

David Saltman

IDA

Abstract: Let A/F be a division algebra of degree 3, and X its Severi-Brauer variety which is a form of the projective plane. The linear system of cubic curves is defined on X, and so we can let $C \subset X$ be one such. If C is a nonsingular such curve, then C is a genus one curve with Jacobian E, an elliptic curve. The question we address is the one asked by Asher Auel, namely, which E arise. We give an answer that depends on the structure of A.

Tuesday, March 15, 2016, 5:00 pm
Mathematics and Science Center: W304

Mathematics and Computer Science
Emory University