

*Department of Mathematics,
University of California San Diego*

Math 209 - Number Theory

Ozlem Ejder

University of Southern California

Torsion subgroups of elliptic curves in elementary abelian 2-extensions

Abstract:

Let E be an elliptic curve defined over Q . The torsion subgroup of E over the compositum of all quadratic extensions of Q was studied by Michael Laska, Martin Lorenz, and Yasutsugu Fujita. Laska and Lorenz described a list of 31 possible groups and Fujita proved that the list of 20 different groups is complete.

In this talk, we will generalize the results of Laska, Lorenz and Fujita to the elliptic curves defined over a quadratic cyclotomic field i.e. $Q(i)$ and $Q(\sqrt{-3})$.

Special Note:

There will be a pre-talk from 1:15 - 1:45 for graduate students and postdocs.

Host: Kiran Kedlaya

Thursday, January 12, 2017

2:00 PM

AP&M 7421
