

Departmental Colloquium

Title: Common torsion points and a uniform Manin-Mumford bound for a family of genus 2 curves

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Abstract: I will discuss joint work with Laura DeMarco and Hexi Ye in which we use dynamically-inspired techniques towards a conjecture of Bogomolov-Fu-Tschinkel asserting a uniform bound on the number of common torsion points of distinct elliptic curves. I will explain our strategy, which has general application to proving uniform bounds in unlikely intersections, and how this theorem implies a uniform bound on the number of torsion images in their Jacobians for a family of genus 2 curves. This talk will be accessible to a general mathematical audience.

Friday, September 28 at 3:00 PM in 636 SEO