

## Algebraic Geometry Seminar

### *Loci of curves with subcanonical points in low genus*

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**Abstract:** In this talk, I will discuss loci of curves with subcanonical points inside moduli spaces of curves. For instance, the locus of curves of genus 3 with a marked subcanonical point has two components: the locus of hyperelliptic curves with a marked Weierstrass point, and the locus of non-hyperelliptic curves with a marked hyperflex. I will show how to compute the classes of the closures of these codimension-two loci in the moduli space of stable curves of genus 3 with a marked point. Similarly, I will present the class of the closure of the locus of curves of genus four with an even theta characteristic vanishing with order three at a certain point. Finally, I will discuss the geometric consequences of these computations. This is joint work with Dawei Chen.

Wednesday, October 14 at 4:00 PM in SEO 427