

Queen's Algebraic Geometry — Seminar —

CURVES EMBEDDED IN TORIC SURFACES

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Abstract

The degree of a smooth plane curve determines its genus, and it is easy to see that not all curves can be embedded into \mathbb{P}^2 . Thinking of \mathbb{P}^2 as a special case of a toric surface, it is natural to try to understand how curves of a fixed genus g embed into other toric surfaces. We will briefly discuss how toric varieties arise as embedding spaces more generally. Then we will focus on case of genus 1 curves embedded in surfaces, emphasizing what commutative algebra tells us about the geometric picture.

Monday, November 5, 2007
4:30pm – 5:30pm
319 Jeffery Hall