



SJÄLVSTÄNDIGA ARBETEN I MATEMATIK

MATEMATISKA INSTITUTIONEN, STOCKHOLMS UNIVERSITET

Gröbner Bases and Elimination in Macaulay 2

av

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Gröbner Bases and Elimination in Macaulay 2

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Abstract

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1 Introduction

Hello world

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2 What is Algebreic Geometry?

2.1 Polynomials

2.2 Affine Varieties

2.3 Rings and Ideals

2.4 Ordering Polynomials

2.5 An Analytic Bridge

2.6 Hilbert Strong Nullstellensatz

3 Gröbner Bases

3.1 Hilbert Bases

3.2 Gröbner Bases

3.3 Properties of Gröbner Bases

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