HONOURS SEMINAR

Cody Antal

Gröbner bases and the implicitization problem

Supervised by Donald Stanley

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1 p.m.
AH 318

Abstract

The theory of Gröbner bases, despite its significance in modern computer algebra, is often overlooked in undergraduate studies. This seminar will address this gap by exploring the fundamental theory and related algorithms of Gröbner bases, with a focus on their application in solving multivariable polynomial systems. The discussion will further extend to the implicitization problem, which involves the conversion between parametric and implicit representations of curves. This comprehensive overview aims to enhance understanding and appreciation of Gröbner bases in mathematics

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