Arithmetic Circuits: An Overview

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Abstract

This talk reviews recent developments in algebraic complexity theory. It outlines some major results concerning structure, completeness, closure, and lower bounds. It describes some techniques that have been central to obtaining these results, including extreme depth reduction, partial derivatives, and padding.

Some recent surveys on arithmetic circuits appear in [4] and [1]. A continuously updated online survey on lower bounds appears at [3].

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Category Invited Talk

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