

# Overview on Real Quantifier Elimination

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## Abstract

Real quantifier elimination problem arises in numerous areas in logic, mathematics, science and engineering: to name a few, geometric theorem proving, topological analysis of curves and surfaces, verification/analysis/synthesis of algorithms, robot motion planning, design of robust control systems, analysis of bio-chemical reactions, statistical model evaluation, and many others. Due to its importance, extensive research has been done and is still being actively carried out. This talk will provide a brief overview on general ideas and various special methods for particular application domains.

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