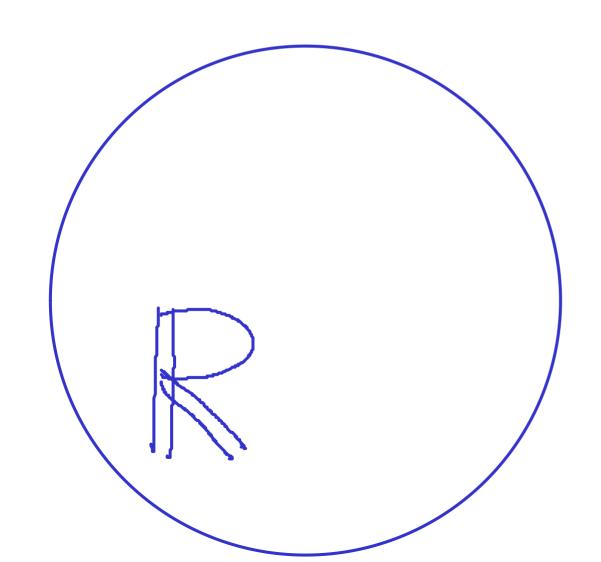
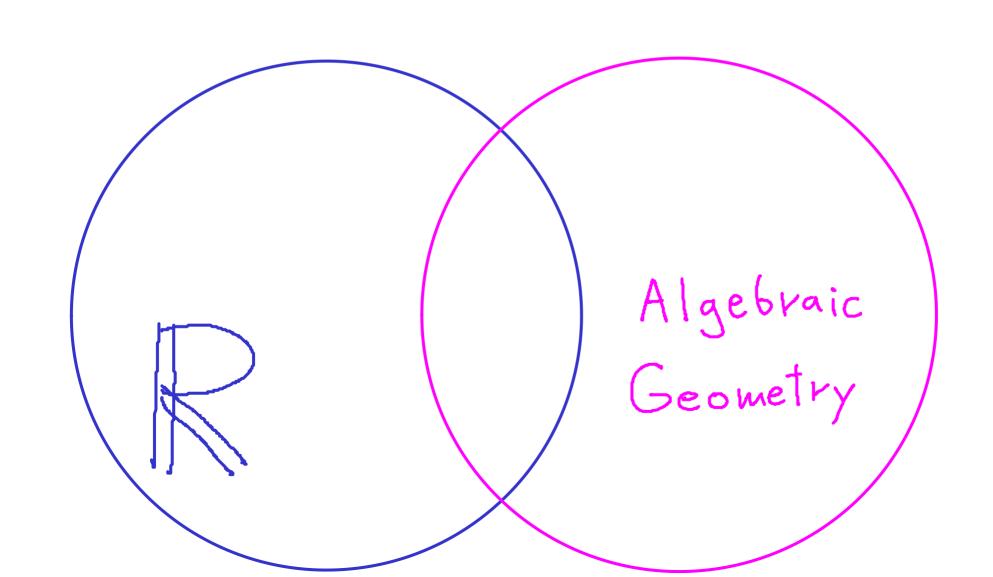
What's new in Computational Real Algebraic Geometry? An Introduction to the

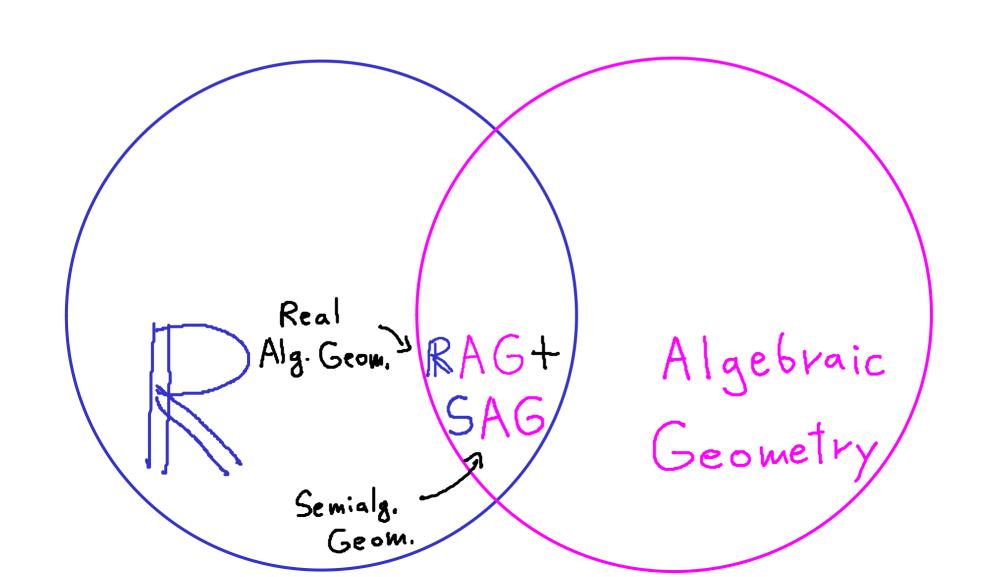
An Introduction to the MS "Computational Real Algebraic Geometry"

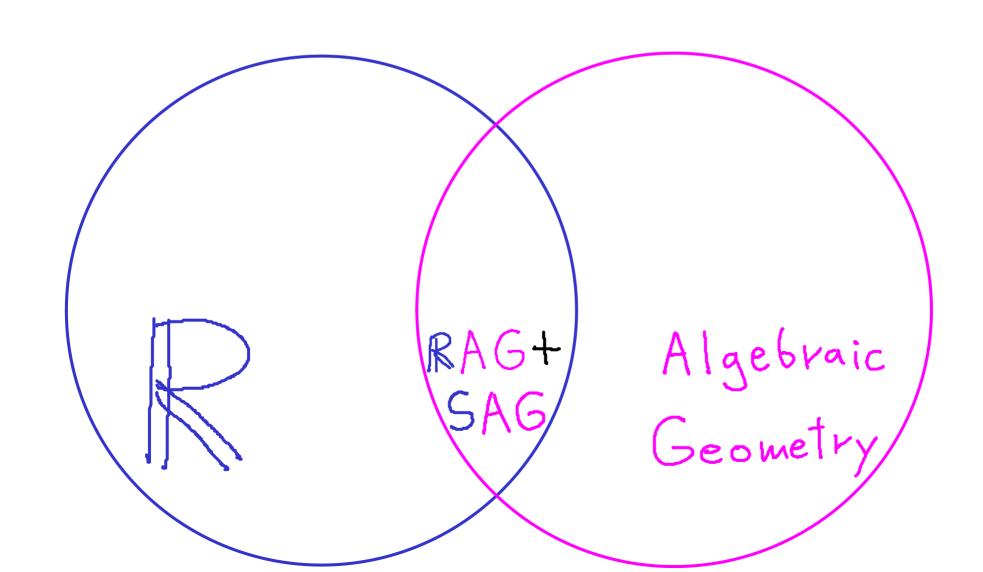
Cordian Riener Vosué Touelli-Cueto

SIAM AAG 21









What is... Computational Real Algebraic Geometry? Computational Mathematics Algebraic Geometry/

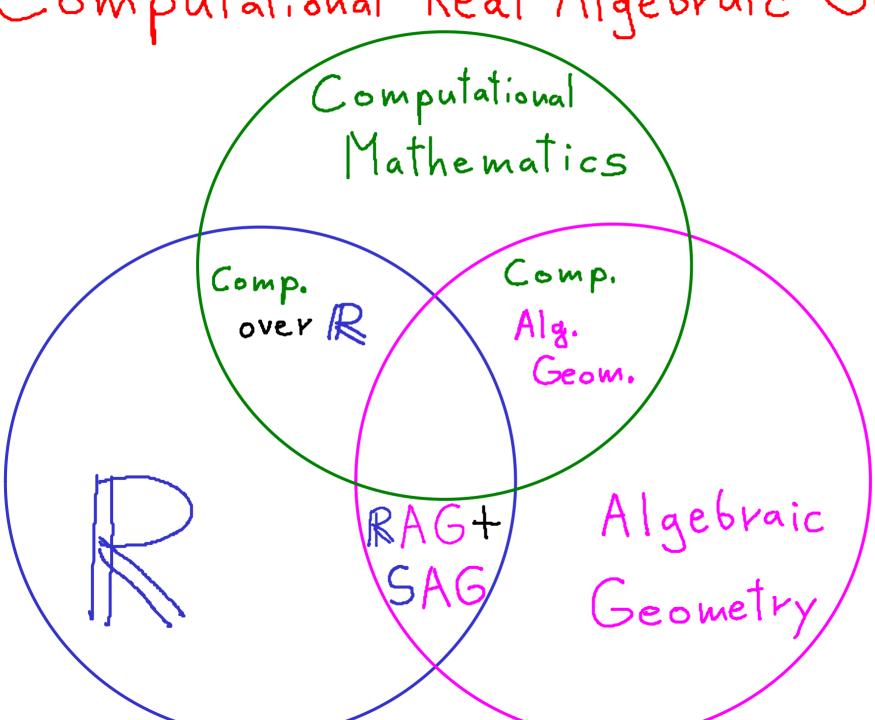
Computational Real Algebraic Geometry? Optimization Computational

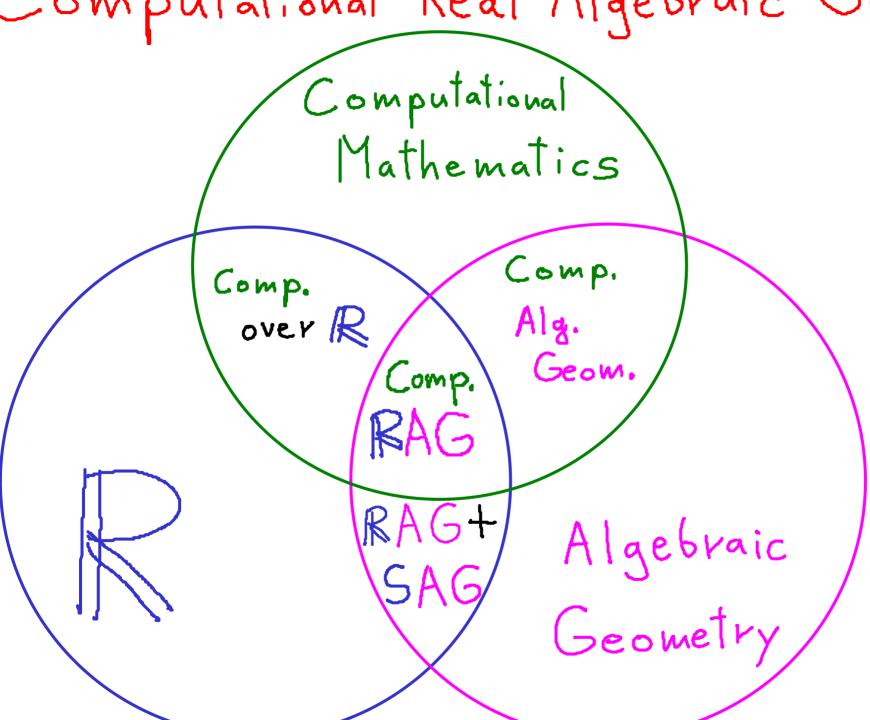
Diff. eq. ~ Mathematics Approximation Comp. Comp. topology over R Algebraic

Geometry,

Computational Real Algebraic Geometry? Computational Mathematics Comp. Vover R Algebraic Geometry/

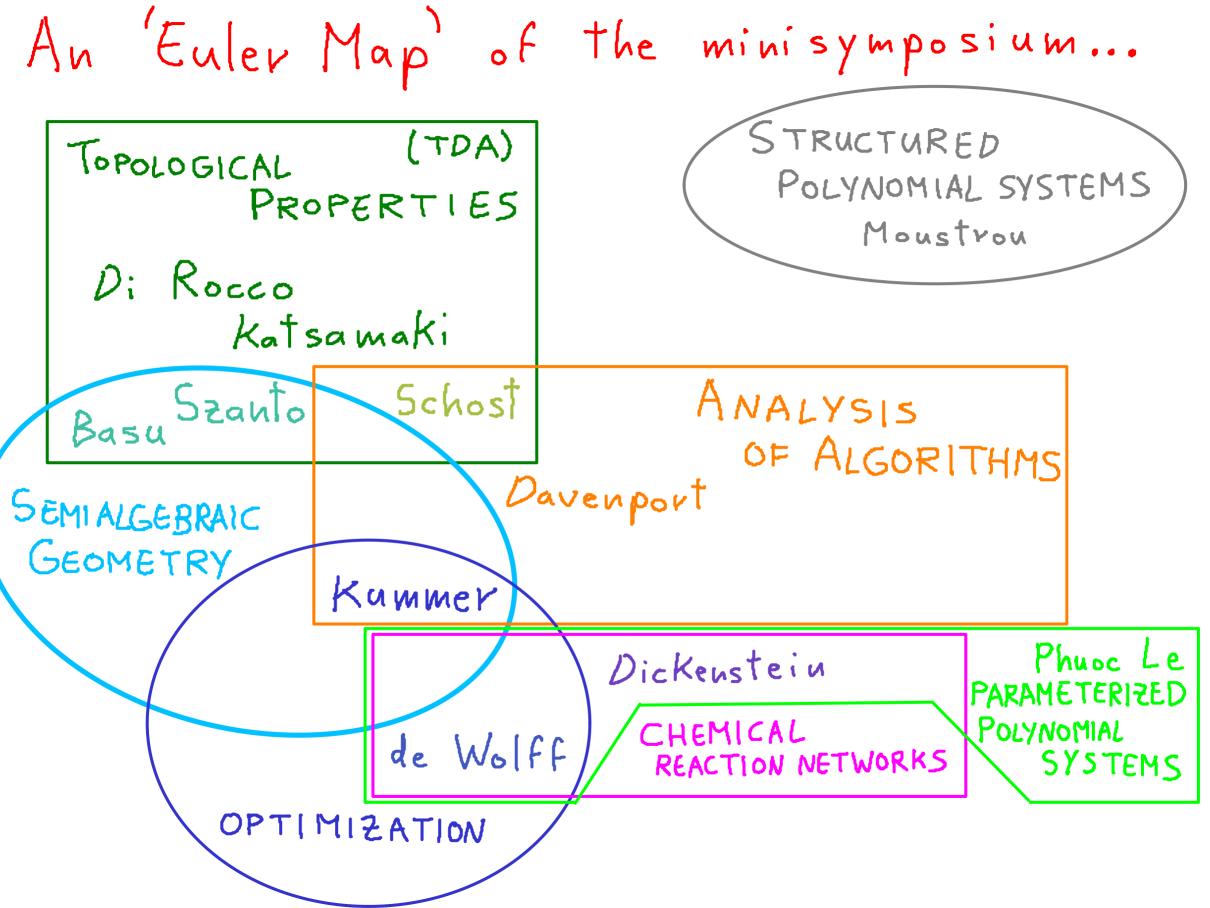
Computational Real Algebraic Geometry? Solving polynomial systems Computational Implicitization/Explicitization Mathematics Computation of geometric invariants Comp. K Comp. Vover R Algebraic Geometry,





What is... Computational Real Algebraic

Computational Real Algebraic Geometry? Computational In the Mathematics middle of the Comp. action Algebraic Geometry,



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Suming up again...

Minisymposium "Computational Real Algebraic Geometry"

M511- Monday, August 16, 2021. 9:00-11:00
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9:00- 9:25 What's New in Computational Real Algebraic Geometry? - Josué Tonelli-Cueto & Cordian Riener

9:30- 9:55 Efficient Simplicial Replacements of Semi-Algebraic Sets - Saugata Basu

10:00-10:25 Bottlenecks and Algebraic Data - Sandra Di Rocco

10:30-10:55 Computational Real Algebraic Geometry in Riemannian Geometry - Mario Kummer

14:40-15:05 On Solving Parametric Polynomial Systems over the Reals - Huu Phuoc Le

15:10-15:35 Specht Polynomials and Solutions to Symmetric Systems of Equations - Philippe Moustrou

15:40-16:05 Varietes of Doubly-Exponential Behaviour in Cylindrical Algebraic Decomposition

- James Davenport

16:10-16:35 On the Bit Complexity of Some Algorithms in Real Algebraic Geometry - Eric Schost

9:00- 9:25 Algorithms and Algebraic Operations on Parametric Curves - Christina Katsamaki

9:30- 9:55 Smooth Points on Real Algebraic Sets - Agnes Szanto

10:00-10:25 Sign Conditions for the Existence of at Least One Positive Solution of a Sparse Polynomial System

- Alicia Dickenstein

10:30-10:55 Applications of Soncs and Other Certificates of Nonnegativity in Chemical Reaction Networks

- Timo de Wolff

All times are New York times! (UCT-4)

Thank you

For your attention!

... we hope you enjoy the minisymposium!