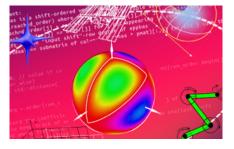
Geometry of Polynomial System Solving, Optimization and Topology



ID de Contribution: 11

Type: Non spécifié

Dimension results for sparse systems homogenized via rational polytopes by Pierre-Jean Spaenlehauer

lundi 16 octobre 2023 09:30 (1 heure)

Abstract. A classical method to compute with sparse polynomials is to homogenize them with respect to Newton polytopes, regarding them as homogeneous elements of Cartier degrees in the Cox ring of a projective toric variety. In this talk, we investigate subvarieties defined by generic polynomial systems in the Cox ring when the degrees are non-necessarily Cartier, with a view towards identifying alternative toric homogenizations that are suitable for practical computations. Joint work with Matías Bender.