

Tenseurs : information quantique, complexité et combinatoires quantiques

Tensors: Quantum Information, Complexity and Combinatorics

Michael Walter
(University of Amsterdam)

Tensors, Symmetries, and Optimization

Many computational problems are invariant under hidden symmetries. Revealing these symmetries can be an essential tool for finding faster algorithms and obtaining new structural insight. I will give an introduction to these connections (which bring together tensors, complexity, and quantum information) and sketch how optimization in curved spaces (which arise naturally from non-commutative symmetries) has recently led to significant progress.