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"Introducing GloptiPoly for linear programming on the cone of nonnegative measures"

Abstract:

In this tutorial talk we present the main features of our public-domain package GloptiPoly, a Matlab parser for solving generalized problems of moments (GPM) and infinite-dimensional linear programming problems on the cone of nonnegative measures. The software allows to build up a hierarchy of finite-dimensional semidefinite programming (SDP), or linear matrix inequality (LMI) relaxations of the GPM, whose associated monotone sequence of optimal values converges to the global optimum.