

Abstract

Applications of semidefinite programming to coding theory

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In this talk we will show how the classical linear programming method, initially due to P. Delsarte, can be generalized using semidefinite programming, and how this framework can be exploited to obtain new results in several directions; more precisely we will show on example cases how to strengthen the classical linear programming bounds, how to derive bounds on metric spaces that could not be handled by the classical method, and how to derive bounds related to pseudo-distances on many points.