

abstract

Computer Science/Discrete Mathematics Seminar II
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

We will give an overview of this system, which has been at the center of recent algorithmic and proof complexity developments. We will give the definitions of the system (as a proof system for polynomial inequalities, and as an SDP-based algorithm), and basic upper and lower bounds for it. In particular we'll explain the recent SOS-proof of the hypercontractive inequality for the noisy hypercube of Barak et al., as well as the degree lower bounds for proving Tseitin and Knapsack tautologies of Grigoriev.