

abstract

COMPUTER SCIENCE/DISCRETE MATH I

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

I will present a construction of an n -point negative type metric such that every t -point sub-metric is isometrically L_1 -embeddable, but embedding the whole metric into L_1 incurs distortion at least k , where both t and k are $(\log \log \log n)^{\Omega(1)}$. The result can also be interpreted as a construction of an integrality gap instance for SPARSEST CUT problem, for a combination of a basic SDP relaxation and t rounds of Sherali-Adams LP relaxation. Similar integrality gap holds for the MAXIMUM CUT problem.
Joint work with Rishi Saket.