

abstract

COMPUTER SCIENCE/DISCRETE MATH SEMINAR I
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

In this talk I will prove the following counterpoint to a result by Kashin and Szarek (cf. Theorem 1, C. R. Acad. Sci. Paris, Ser. I, 1336 (2003) 931-936)):

There exists a map ϕ from infinite-dimensional euclidean space into the space of continuous complex-valued functions on $[0,1]$, and a constant $K > 0$, such that for all real-valued vectors x and y ,

- (1) the max-norm of $\phi(x)$ is at most K times the euclidean-norm of x ,
- (2) the inner product of x and y equals the integral over $[0,1]$ of $(\phi(x))(\phi(y))$.

Modulo the usual constraints, the talk will be elementary and self-contained.