

## abstract

[Video of this lecture](#) COMPUTER SCIENCE/DISCRETE MATH II

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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I will first give an overview of several constructions of graph sparsifiers and their properties. I will then present a method of sparsifying a subgraph  $W$  of a graph  $G$  with optimal number of edges and talk about the implications of subgraph sparsification in constructing nearly-optimal ultrasparsifiers and optimizing the algebraic connectivity of a graph by adding few edges.

The talk is based on joint work with Makarychev, Saberi, Teng.