

Mathematics Department Colloquium

Organizer(s): Kenneth Ribet

Thursday, 4:10–5:00pm, 60 Evans

Apr. 30 **Anna Gilbert**, University of Michigan

A survey of sparse approximation

The past 10 years have seen a confluence of research in sparse approximation amongst computer science, mathematics, and electrical engineering. Sparse approximation encompasses a large number of mathematical, algorithmic, and signal processing problems which all attempt to balance the size of a (linear) representation of data and the fidelity of that representation. I will discuss several of the basic algorithmic problems and their solutions, including connections to streaming algorithms and compressive sensing.