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## Topology of point cloud data



**Abstract:** Algebraic topology can be viewed as a method for geometric pattern recognition. In recent years, methods have been developed for extending the power of algebraic topology to situations where one doesn't have access to the full space, but only a finite set sampled from it (a "point cloud"). This extension has a lot of promise as a way to analyze high dimensional data, and we will discuss it, with examples, in this talk.

## Monday, March 12, 2007, 12:15–1:05pm, 383N

## refreshments will be provided

http://math.stanford.edu/~emalm/fars/