

California State University, Fullerton

DEPARTMENT of MATHEMATICS

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“An Introduction to Geometric Data Analysis and its Possible Applications”

The analysis of patterns in data has typically been a subject in statistics and engineering. Recently, however, fundamental mathematical theory in areas such as linear algebra and differential geometry have provided a new mathematical framework and insights for understanding large data sets residing in spaces of large ambient dimensions. In this talk, we will explore a wide range of applications that are natural under the linear algebra and differential geometry framework. In particular, applications in image compression, handwritten digit and face recognition, image reconstruction from noisy and missing data will be discussed.

Friday, April 10

1-2 pm

MH 480

*There will be refreshments immediately after the talk in
MH 484.*