

COLLOQUIUM

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Dimension Reduction by Groups

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A405 Wells Hall

10:20 a.m. - 11:10 a.m.

Refreshments: 10:00 a.m.

Abstract

In many regression applications, the predictors fall naturally into a number of groups or domains, and it is often desirable to establish a domain-specific relation between the predictors and the response. In this talk, we consider dimension reduction that incorporates such domain knowledge. Our formulation also accommodates the situations where dimension reduction is focused only on part of the predictors. Through simulation and real data analyses, we show that the proposed method achieves greater accuracy and interpretability than the dimension reduction methods that ignore group information.

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