

CALIFORNIA STATE UNIVERSITY, LONG BEACH

THE MATHEMATICS COLLOQUIUM

presents

Dr. Xiaoming Huo

University of California, Riverside

speaking on

Manifold Learning Based Dimension Reduction and Statistical Properties

Friday, March 17, 2006

12:00PM-1:00PM

FO3-200A

Abstract: Recently, manifold learning has attracted a lot of attention in both machine learning and statistics communities. I will give an overview and present many interesting applications. An appealing feature of many manifold learning algorithms is that their solutions correspond to a linear invariant subspace. Hence mathematical analysis can be implemented on the behavior of their solutions in a relatively common framework. I will describe some recent results regarding the worst case analysis with additive noises.