## MICHIGAN STATE UNIVERSITY

Department of Statistics and Probability

## COLLOQUIUM

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## Approximation of Points on Low-dimensional Manifolds via Compressive Measurements

Tuesday, January 14, 2014 10:20 a.m. - 11:10 am Refreshments 10:00 am C405 Wells Hall

Abstract:

We will consider the approximate reconstruction of points, x, which are close to a given compact d-dimensional submanifold of R^D using a small number of linear measurements of x. In particular, a compressive sensing algorithm is presented which requires a number of measurements of x which is independent of the extrinsic dimension D.

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