

THE CHINESE UNIVERSITY OF HONG KONG

Department of Statistics

will present a seminar entitled

**A Two Sample Test for Ultra High Dimensional Data with
Applications to Gene Sets Testing**

by

**Professor Song Xi Chen
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on

**Tuesday, 15 January 2008
2:00pm – 3:00pm**

in

**Lady Shaw Building C5
The Chinese University of Hong Kong**

Abstract:

We proposed a two sample test for means of high dimensional data when the data dimension p is a lot larger than the sample size n , the so-called “large p small n ” situation. The classical Hotelling's T^2 test does not work for high dimensional data. The test does not require any condition on the relationship between the data dimension and sample size. This offers much flexibility in analyzing high dimensional data and means that the proposed test can be applied for the “large- p small n ” situation. An important application of the proposed test is in testing significance for sets of genes in genetic studies. We will demonstrate empirically the use of the proposed test on a biological data set.

All are Welcome