



**The Hong Kong Polytechnic University
Department of Applied Mathematics**

Colloquium

On

Optimization problems on spheres and tori

by

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Abstract

On the circle the solution to a variety of criteria for measuring the quality of a point distribution is to take equally spaced points. However on the surface of the sphere, which is of great practical interest as a first model for the earth's surface, different criteria give different answers - except in a few very special cases. This produces a variety of challenging, highly nonlinear optimization problems which typically have many local minima. Applications range from global climate models, understanding virus interactions to the design of golf balls. This is a general talk, with more specialist talks in the workshop on "Approximation and Optimization on the Sphere and other Surfaces" on Saturday, 24th October.

Date : 16 October, 2009 (Friday)
Time : 3:00 – 4:00 p.m.
**Venue : Departmental Conference Room HJ610
The Hong Kong Polytechnic University**

***** ALL ARE WELCOME *****