



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

**Seminar
On**

**One Optimization Problem and One Limit problem
- Connecting Dynamic Geometry and Analytic
Geometry**

by

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Abstract

We will discuss necessary conditions of finding the shortest distance between two non-convex surfaces and how to find it using Lagrange multipliers with its geometric interpretation. We will also look at a challenging limit problem that can be found from calculus textbook and see how we can extend the result to three dimensional one. In this talk, we will see many conjectures are done through dynamic geometry software packages and further analytical proofs are carried out by computer algebra Systems.

Date : September 11, 2006 (Monday)
Time : 3:30 – 4:30 p.m.
**Venue : Departmental Conference Room HJ610
The Hong Kong Polytechnic University**

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