

THE UNIVERSITY



OF HONG KONG

Department of Mathematics

# Numerical Mathematics and Applied Analysis Group Seminar (NMAA)

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## Globally Convergent and Efficient Homotopy Methods for Nonconvex and Nonsmooth Programming

**Professor YU Bo**

Dalian University of Technology

on Monday, October 12, 2009 at 2:30pm  
in Room 309, Run Run Shaw Building, HKU

### **Abstract**

In this talk, I will give a brief survey of some homotopy methods for nonconvex programming. They are globally convergent under fairly weak conditions: normal cone condition, quasi-normal-cone condition or pseudo-cone condition. Some smoothing homotopy methods for min-max-min programming, a typical class of nonsmooth programming, as well as some new results on their efficient numerical implementation will also be introduced.

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***All are welcome***

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