



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

**Seminar  
on**

**Studies of Low Order Quadrilateral  
Finite Element Methods**

**by**

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**Abstract**

Low order quadrilateral finite elements are very efficient in engineering applications. In this talk we will discuss convergence and super-convergence properties of some low order nonconforming finite elements, namely the Wilson element, the rotated Q<sub>1</sub> element and its extension from usual rectangular meshes to general quadrilateral. Numerics are presented to confirm theoretical studies.

**Date : 3 February 2006 (Friday)**  
**Time : 2:30 – 3:30 p.m.**  
**Venue : Departmental Conference Room HJ610  
The Hong Kong Polytechnic University**

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