The Hong Kong Polytechnic University
Department of Applied Mathematics

Colloquium

On

Finite Element Approximation for Reissener-Mindlin Plates

by

Professor Zhong-Ci SHI
Institute of Computational Mathematics
Chinese Academy of Sciences

Abstract

The Reissner-Mindlin plate model is one of the most commonly used models of a moderate-thick to thin elastic plate. However, a direct finite element approximation usually yields very poor results, which is referred to LOCKING phenomenon.

In the past two decades, many efforts have been devoted to the design of locking free finite elements to resolve this model, most of these work focus on triangular or rectangular elements, the latter may be extended to parallelograms, but very few on quadrilaterals.

In this talk we will give an overview of the recent development of low order quadrilateral elements and present some of our new results.

Date : **18 March 2011 (Friday)**

Time : **3:00 p.m. – 4:00 p.m.**

Venue : **Departmental Conference Room HJ610**
The Hong Kong Polytechnic University

* * *   ALL ARE WELCOME   * * *