

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Wei-Chi YANG**

( *Department of Mathematics and Statistics, Radford University,  
USA* )

报告题目:

**Importance of Content Knowledge  
and Exploration in Mathematics**

邀请人: 林群 院士

报告时间: **2013 年 8 月 30 日 (周五)**

**下午 16:00-17:00**

报告地点: 科技综合楼三层 **311**

计算数学所报告厅

## **Abstract:**

This is a talk based on my plenary speech at the Asian Technology Conference in Mathematics (<http://atcm.mathandtech.org>). the first Korea chapter during August 7-10 of 2013. No one will dispute the importance of adequate mathematics content knowledge for students. In this talk, we will give a brief comparison between the mathematics education systems in the US and some Asian countries. We show examples where basic manipulation skills are appreciated for solving problems in many Asian education systems. In the meantime, we shall see examples where technological tools are crucial for explorations and cultivating creative thinking skills. We recognize that examinations are not going to disappear in most education systems. However, we suggest ways of improving students' content knowledge through innovative use of evolving technological tools. We will show some optimization problems where dynamic software and computer algebra system are needed before achieving the results.

欢迎大家参加!