

# MME Seminar 2016

## Session 4

Date: 10th Nov, 2016  
Time: 3.30 to 4.30 pm

Venue: Journal Room (NIE7-03-16)



### **Power of Noticing $\propto$ Differences in Environment**

Many of us attended ICME 13 hosted by University of Hamburg. The scientific programme was meticulously and thoughtfully organised, from Early Career Research Day to the Final day offering. In this presentation Swee Fong will not discuss her talk nor the deliberations of her Topic Study Group as the contents can be found in the book *Early Algebra: Research into its Nature, its Learning, its Teaching*. Instead, she will share some of her thoughts based on similarities and differences which she noticed between Hamburg University and

our very own institution, some humorous (hopefully), and others more contemplative (perhaps).

### **Holistic Approach to Curriculum Review of Undergraduate Mathematics**

*Kok Ming* will share the paper presented by Pee Choon at ICME 13 in the TSG on Mathematics Education at Tertiary Level. The paper reports the motivation for an all-faculty mathematics undergraduate curriculum review and design carried out in our MME AG that is based on the belief that a broader based involvement will be able to holistically achieve desired learning outcomes, such as advanced mathematical thinking, mathematical processes and the ability to communicate mathematically and collaborate, while still covering the intended syllabus.



### **Use of Video in Teacher Professional Development**

*Yew Hoong* will share some thoughts gleaned from organising and participating in a Discussion Group (DG) in ICME-13. The following questions guide our DG discourse: (1) Discuss the design of a successful model of video use in PD for mathematics teachers. Provide evidence of its “success”. Explicate the role of videos in the PD model. (2) What are existing design principles for successful use of video in PD? What is the connection between these principles and

existing theories of teacher learning and of video as teacher learning tool? What cross-countries and cultural differences exist? (3) How can we calibrate a video-based PD model in a way that addresses different emphases of knowledge needs of mathematics teachers along relevant knowledge strands (such as the now well-known domains of Mathematics content knowledge, mathematics pedagogical content knowledge, and knowledge of student learning)?

All are welcome!