

# Joint Statistics Seminar

*The Hong Kong University of Science and Technology*

## Accommodating Multiple Objectives in the Design of Response-adaptive Repeated Measurement Designs

*by*

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**Date: December 15, 2011 (Thursday)**

**Time: 4:00 p.m. – 5:00 p.m.**

**Venue: Room 3315 (near Lift 17/18)**

### **Abstract**

In a response-adaptive design, we review and update the trial on the basis of outcomes in order to achieve a specific goal. Response-adaptive designs for clinical trials are usually constructed to achieve a single objective. In this presentation, we introduce a new adaptive allocation rule to improve current strategies for building response-adaptive designs to construct multiple-objective repeated measurement designs. This new rule is designed to increase both estimation precision and treatment benefit by assigning more patients to a better treatment sequence. We demonstrate that designs constructed under the new proposed allocation rule can be nearly as efficient as fixed optimal designs in terms of the mean squared error, while leading to improved patient care.

❖ ***All interested are welcome!*** ❖

*For details, please contact ISOM Department.*