



**INSTITUT SAINS MATEMATIK  
UNIVERSITI MALAYA  
SIRI KOLOKIUUM**

**Tajuk:** Robin Hood and Inequality  
(Majorization: Here, There and Everywhere )

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**Masa:** 3:00 pm – 4:00 pm

**Abstract**

Two closely parallel concepts, majorization (in a mathematical context) and the Lorenz order (in an Economic context), admit a colorful interpretation as orderings that are essentially determined by acceptance of the Robin Hood axiom that robbing a little from the rich and giving it to the poor will decrease overall inequality in a population. These concepts are in fact useful in an enormously diverse array of research settings. If a problem has a solution that is a vector with equal coordinates, it may well be susceptible to rephrasing in terms of maximizing or minimizing a cleverly chosen function that is monotone with respect to the majorization ordering. In other words, Robin Hood is lurking in many unexpected corners. Most of our discussion will focus on Robin's activity in an income or wealth redistribution scenario, but some other, less traditional, settings will be described in which we can encounter a role for him.

**SEMUA DIJEMPUT HADIR**