

# Seminar

# **"Optimal Contest Design with Incomplete Information:** The Role of Negative Prizes"

(in English)



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Date: 27 April 2017 (Thursday) Time: 2:00pm – 3:30pm Venue: WYL106, 1/F, Dorothy Y. L. Wong Building

#### **Biography:**

Professor Jun Zhang is Associate Professor and ARC Research Fellow (DECRA) at University of Technology Sydney. His research interests are in economic theory, industrial organization and operation management. He received his PhD in Economics from Queen's University and his MA in Economics from University of Guelph, Canada.

### Abstract:

In this paper, we analyze the role of negative prizes in a fixed budget contest and fully characterize the effort-maximizing mechanism. Contestants are risk averse, have independent private abilities, and their utility function is additively separable in prizes and effort. The effort-maximizing contest generally requires multiple positive and negative prizes. Negative prizes are for low-ability contestants; they generate additional prize money to better incentivize those with sufficiently high abilities. To induce the low-ability contestants to participate, they split (a proportion of) the prize budget equally when all contestants are weak. We find that allowing negative prizes can enhance the total effort dramatically. When contestants are risk neutral, the effort-maximizing mechanism can be implemented by a modified all-pay auction.

### **All Are Welcome**

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