APPLIED MATHEMATICS COLLOQUIUM

Second Order Interfaces and Manipulation

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ABSTRACT:
The Gibbard Satterthwaite theorem in economics states that any voting system on 3 or more alternatives can be manipulated unless it is a dictatorship.

Natural quantitative and computational questions arise as to the probability of manipulation voting profiles and the computational complexity of manipulating. In the talk, I will discuss some answers to these questions. The answers rely on a new isoperimetric theory involving lower bounds on interfaces where 3 bodies meet. Joint work with Marcus Issakson and Guy Kindler.

Monday September 21st 2009
4:30 PM
Building 4, Room 370
Refreshments are available in Building 2, Room 290
(Math Common Room) between 3:30 – 4:30 PM

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