

## **Economics Seminar, Indian Statistical Institute, New Delhi.**

**SPEAKER: Shrutivandana Sharma, Yahoo! Labs**

**TITLE: Auctions for Social Advertising**

**TIME: 3:30 PM - 5:00 PM.**

**DAY & DATE: Wednesday, 14th March, 2012**

**PLACE: Auditorium**

### **Abstract:**

We consider the design of auctions for a social advertising setting, where ads displayed on a webpage can be shared by the user viewing the page with her friends in her social network. In this setting advertisers compete for allocation on webpages with the expectation of obtaining additional impressions (on the users' friends' pages) through ad sharing. We consider a model where advertisers have two-dimensional types representing their valuations of impressions seen by a user and a friend. Also, the advertisers pay different prices for the two types of impressions. For this model we investigate the design of auctions that consist of two stages: stage-1 in which ad allocation is done on the webpage, and stage-2 in which the winning advertiser is charged a payment after observing the number of shared impressions. We define criteria for individual rationality and incentive compatibility of such social advertising auctions and characterize the auctions that possess these properties. We develop efficient and optimal auctions under the scenario where advertisers have beliefs about the expected number of shared impressions they would obtain.

<http://www.isid.ac.in/~pu/seminar.html>