Editor's Introduction

I am very happy to introduce Issue 7.3 of SIGecom Exchanges.

This issue starts with several announcements about conferences and books. Das and Ostrovsky announce the first edition of a new conference on Auctions, Market Mechanisms, and their Applications (AMMA). This conference (whose deadline is very soon!) will bring computer scientists, economists, and practitioners together. It is intended to complement the EC conference, with somewhat more of a focus on practical and empirical aspects (while still welcoming theoretical papers). Feigenbaum reports on the 2008 NetEcon workshop, which focuses on the application of economic and game-theoretic principles to the design and analysis of networked systems. She encourages discussion by SIGecom members on their hopes for NetEcon. Leyton-Brown and Shoham announce their two new books: their long-awaited *Multiagent Systems*, which contains a rigorous introduction to multiagent systems with deep coverage of game theory, mechanism design, and auctions, and *Essentials of Game Theory*, an 88-page crash course introduction to game theory.

The next three contributions concern mechanism design, auctions, and pricing. In "Characterizing Truthful Mechanisms with Convex Type Spaces," Archer and Kleinberg give a 9-page annotated discussion of their recent characterization results for truthful allocation functions (that is, allocation functions for which there exists a payment function that results in a truthful mechanism). In "Item Pricing for Revenue Maximization," Balcan, Blum, and Mansour discuss a setting in which a seller has multiple items for sale, and faces buyers with complex valuations over subsets of these items, who arrive one at a time; the seller must set prices on individual items, with the goal of maximizing revenue. In the full-length paper "Diversification in the Internet Economy: The Role of For-Profit Mediators," Singh, Roychowdhury, Gunadhi, and Rezaei consider keyword auctions, and study two scenarios in which additional capacity is generated: in one, for-profit agents bid for slots in the original auction and subsequently run their own subauctions; in another, the auctioneer provides the additional capacity herself.

The next three letters focus on topics related to forecasting, prediction markets, and recommender systems. In "The Complexity of Forecast Testing," Fortnow and Vohra consider the testing of (say) weather forecasters. It is known that any test that passes a forecaster that knows nature's distribution can also be probabilistically passed by a forecaster with no knowledge of future events, but Fortnow and Vohra show that in some cases such a forecaster would be required to factor numbers, suggesting that the forecaster will require exponential time (even though the test runs in linear time). In "Eliciting Properties of Probability Distributions: The Highlights," Lambert, Pennock, and Shoham consider the problem of incentivizing an expert to reveal properties of a probability distribution. They give a characterization of which properties can be truthfully elicited, and give the form of the associated payment functions. They also consider eliciting sets of properties, since sometimes a set of properties that is truthfully elicitable can contain a property that is not, in and of itself, truthfully elicitable. Finally, in "Manipulation-Resistant Recommender Systems through Influence Limits," Resnick and Sami discuss how to make recommender systems robust against manipulation while still making good use of information from genuine raters. This is done by evaluating whether a user's ratings have a beneficial impact on the predictions, and limiting the overall negative impact that a rater can have.

In the final letter of this issue, "Strategic Network Formation with Structural Holes," Kleinberg, Suri, Tardos, and Wexler study network formation games in which agents try to position themselves strategically to occupy bridging positions in the network. They study the types of network that arise in equilibrium.

Finally, there are the puzzles. The new Editor's Puzzle considers a setting where agents sequentially decide which product to adopt based on which, if any, product has been adopted by an agent they admire. The most elegant solution will be published in the next issue. There is also a solution to the previous issue's puzzle, by Sørensen, who shows that that puzzle's game, in which the players have to decide which products to release, can be solved by iterated strict dominance. (Incidentally, we still need a nice solution to the puzzle from Issue 7.1; see Issue 7.2 for a hint.)

I would like to thank the reviewers for this issue, as well as our Information Director Daniel Reeves who has once again been very helpful in putting this issue together.

Enjoy!

Vincent Conitzer
Editor-in-Chief