

## Towards a Micro-Economic Theory of Networked Auctions

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The Internet has become a primary vehicle for trade among individuals and organisations, in addition to its well established role as a key tool in currency and commodity markets. The structure offered by information technology can therefore allow us to examine issues of interest to economists, such as price formation, using probabilistic methods that are commonly used in the theory of telecommunications and performance evaluation of computer systems and networks. Assuming that auctions are used as the rules for buying and selling, this lecture will present our recent mathematical results on measures of interest such as the sale price of goods, the income per unit time achieved by sellers, and the time spent by a buyer to purchase an item.

Erol is a Member of the Turkish Academy of Sciences (TUBA) the French National Academy of Engineering (Académie des Technologies), Foreign Member of the Hungarian Academy of Sciences, and Member of Academia Europaea. He is the Professor in the “Dennis Gabor Chair” at Imperial College. A highly cited (h=43) researcher, his work is currently funded by UK EPSRC, the UK Technology Strategy Board, and EU FP7. He consults for industry and serves as Editor-in-Chief of The Computer Journal (British Computer Society), and is on the editorial board of the Proceedings of the Royal Society. A graduate of METU, Ankara, he received the MS and PhD degrees from The Polytechnic Institute of New York University (Brooklyn Poly), and a Doctorat d’Etat ès Sciences degree from the Université Pierre et Marie Curie (Paris). A Fellow of IEEE, ACM and IEE, he won the ACM SIGMETRICS Award in the USA in 2008 for work on computer and network performance modelling and analysis. In 1996 he was the first computer scientist to receive the Grand Prix France Telecom of the French Academy of Sciences. He was awarded Brooklyn Poly’s Distinguished Alumnus Award in 2010. He received the Italian honours of Commander of Merit (2005), and Grand Officer of the Order of the Star (2007), and the French honour of Officer of Merit (2001). He has received Honoris Causa doctorates from the Universities of Liege (Belgium), Roma II (Italy), and Bogazici (Istanbul). Erol has graduated numerous PhD’s who are academics and leaders in France, the USA, Greece, Turkey, China, UK, Venezuela, etc.

### References

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