

R. Preston McAfee

Starting in 2004, R. Preston McAfee is the *J. Stanley Johnson* Professor of Business, Economics and Management at the California Institute of Technology. He teaches business strategy, managerial economics and principles of economics. McAfee wrote *Introduction to Economic Analysis*, a free, open-source text that spans both principles and intermediate microeconomics.

McAfee is the author of over seventy articles published in scholarly economics journals, many of them on auctions and bidding, and co-author of a book *Incentives in Government Procurement*. McAfee served as one of four economists who edit the *American Economic Review*, the most prominent economics journal, for over nine years, and serves as an associate editor of the *Theoretical Economics*, a new open access journal. He is a Fellow of the Econometric Society. McAfee taught business strategy at the University of Chicago's Graduate School of Business in 2000-1, and is the author of *Competitive Solutions: The Strategist's Toolkit*, published by Princeton University Press in 2003.

McAfee is a recognized expert in industrial organization, and has been hired as a consultant by the U.S. Department of Justice, Antitrust Division and the Federal Trade Commission. McAfee has advised on matters concerning mergers, collusion, price-fixing, electricity pricing, bidding, procurement, sales of government property. In 1995, McAfee extensively advised the Federal Communications Commission on the design of auctions for spectrum to be used for personal communications services. McAfee advised the Federal Trade Commission on the mergers of Exxon and Mobil, and BP and Arco, and testified in the *FTC v. Rambus*. Recently he testified in the U.S. versus Oracle on the competitive effects of the proposed Peoplesoft-Oracle merger.

Prior to joining Caltech, McAfee was the *Murray S. Johnson* Chair in Economics at the University of Texas at Austin, and served as department chair in 1998. Previously, McAfee was a visiting professor at Caltech and a professor at the University of Western Ontario. McAfee received the Ph.D. in economics from Purdue University in 1980, Master's degrees in both mathematics and economics in 1978, and the Bachelor's degree in economics, summa cum laude and Phi Beta Kappa, from the University of Florida in 1976.

McAfee has been extensively involved in the creation of markets to replace government administrative procedures, including sale of the use of the radio frequencies, and the establishment of a marketplace for electricity. The U.S. Federal Communications Commission used to allocate the use of the radio spectrum by administrative procedures. In 1994, Congress authorized the FCC to use auctions. After an extensive public debate, the FCC chose an auction designed by McAfee, Paul Milgrom and Robert Wilson, the latter two being professors at Stanford University. This auction is designed to replicate marketplace transactions and to insure market outcomes. Its novelty arises from the simultaneous sale of multiple items. The problem facing bidders is that it is difficult to bid on one item without knowing the final sale prices of the other items. The simultaneous ascending auction solves this problem by employing rounds of bidding on all items simultaneously, with prices ascending, so that no item is sold until the bidding is finished on all the items. The auction has raised over \$17 billion for the Federal Government.

McAfee, Milgrom, Wilson and John McMillan formed a company, Market Design, Inc., that assists governments in the sale of assets such as radio frequencies, mineral rights, airports, and other assets. The company designs market mechanisms for the transactions, which insure that a market price is paid for the asset. The company is involved in sales in Australia, Canada, Mexico, New Zealand, and Peru at this time.