

### Conference on the

### EXPERIMENTAL AND BEHAVIORAL ASPECTS OF FINANCIAL MARKETS





### Friday, January 12, 2018 Location: Argyros Forum, Room 201

9 a.m.	Continental Breakfast
9:15 to 9:20 a.m.	Welcome
9:20 to 10 a.m.	Bhansali "Behavioral aspects of tail risk hedging"
10 to 10:40 a.m	Cooper "The persistence of fee dispersion among mutual funds"
10:40 to 11 a.m.	Break (coffee and tea provided)
11 to 11:40 a.m	Waymire "The economic value of double-entry bookkeeping"
11:40 a.m. to 12:20 p.m.	Huber "Does investor risk perception drive asset prices in markets? Experimental evidence"
12:20 to 1:50 p.m	Lunch (Argyros Forum, Faculty Athenaeum)
1:50 to 2:30 p.m	Roll "Tick size, price grids and market performance: Stable matches as a model of market dynamics and equilibrium"
2:30 to 3:10 p.m	Friedman "High frequency trading and financial market formats: Some laboratory tests"
3:10 to 3:30 p.m	Break (coffee and tea provided)
3:30 to 4:10 p.m	Hanaki "Effects of eliciting long-run price forecasts on market dynamics in asset market experiments"
4:10 to 4:50 p.m	Duffy "Experimental asset markets with an indefinite horizon"
4:50 to 5 p.m	Concluding remarks

# Speakers Bios



### VINEER BHANSALI

Vineer is the founder and CIO of LongTail Alpha LLC. Vineer's 24-year investment career started at Citibank, where he founded and managed the Exotic and Hybrid Options Trading Desk. He later joined Salomon Brothers in its Fixed Income Arbitrage Group, followed by the CSFB Proprietary Trading Group. Dr. Bhansali was at PIMCO for 16 years, serving the last eight years as MD and Head of the Quantitative Portfolios Team, which he founded in 2008. Among other responsibilities, he was the lead PM for the PIMCO TRENDS Managed Futures Strategy Fund, the PIMCO Tail Risk Hedging Funds, PIMCO RealRetirement and RealPath Funds, and PIMCO's indexed ETFS. He was also co-PM of the PIMCO Global Multi-Asset Fund, PIMCO Global Relative Value Fund and PIMCO Distressed Senior Credit Opportunities Fund. Dr. Bhansali also managed all of PIMCO's analytics from 2000 to 2010.

He has written four books on finance: "Pricing and Managing Exotic and Hybrid Options"; "Fixed Income Finance: A Quantitative Approach"; "Bond Portfolio Investing and Risk Management"; and his most recent, "Tail Risk Hedging", and authored over 25 refereed papers on topics as varied as option pricing, fixed income, tail hedging, asset allocation and economics in leading journals that include the Journal of Finance, Financial Analysts' Journal, Journal of Portfolio Management, and Journal of Risk. He has received numerous awards, including the Graham and Dodd Scroll Award and TIME magazine's college achievement award. Under Bhansali's leadership, PIMCO received the Risk Manager of the Year Award in the asset-management category in 2002 from Risk Magazine.

Dr. Bhansali received his Ph.D. in Theoretical Physics from Harvard University in 1992 and M.S. and B.S. degrees in Physics from Caltech in 1987. He is an ATP rated pilot with over two thousand hours in aircraft including jets and helicopters. He has run over thirty five ultramarathons, including receiving a silver buckle at the Western States 100 mile Endurance Run.



### MICHAEL COOPER

Professor Cooper is the A. Blaine Huntsman Presidential Chair in Finance at the University of Utah's David Eccles School of Business. Prior to joining the faculty at the University of Utah, Professor Cooper was a finance professor at Purdue from 1997 – 2005. Professor Cooper also worked at the Goldman Sachs Asset Management division from 2008 – 2009.

Professor Cooper's primary research and teaching interests are in the area of investments. His current research is focused on equity returns predictability, asset pricing models, measures of firm innovation, the effects of firm location on firm performance, and the behavior of mutual fund investors. Professor Cooper's research has appeared in numerous academic journals including the Journal of Business, the Journal of Finance, the Journal of Financial Economics, and the Review of Financial Studies. His research has won several awards, including the 2000 Barclays Global Investors Award from the European Finance Association and the 2006 Fama/DFA best paper award in The Journal of Financial Economics. His research has been frequently covered in the popular press, with citations in the Wall Street Journal, the New York Times, the Washington Post, USA Today, the Financial Times, and many others.



### **JOHN DUFFY**

John Duffy is Professor of Economics at the University of California, Irvine. His research concerns the microfoundations of macroeconomic behavior, with a particular focus on the manner in which individuals form forecasts, learn over time and resolve coordination problems. He uses computational, experimental and theoretical methods to address these topics.



### Daniel Friedman

Daniel Friedman earned a PhD in Mathematics, worked two years at Bank of America in special projects, and then began his academic career at UCLA and UC Berkeley. He joined his alma mater, UC Santa Cruz, as a tenured professor in 1985, and has remained there ever since. He has broad research interests in applied economic theory, with emphasis on learning and evolution, laboratory experiments, and financial markets. The coauthor of five academic books, fourteen NSF grants, and roughly 100 research articles, he currently is studying mainly market design, and evolutionary dynamics of continuous strategies or traits.

His popular book, Morals and Markets: An Evolutionary Perspective on the Modern World, was published by Palgrave-MacMillan in October 2008. A second paperback edition, co-authored with journalist Daniel McNeill, appeared in June 2013 with the subtitle: A Dangerous Balance.



### Nobuyuki Hanaki

Nobuyuki Hanaki is a professor of Economics at Université Côte d'Azur, France. After receiving a Ph.D. in economics from Columbia University, he has taught at University of Tsukuba (Japan) and Aix-Marseille Université (France) before joining Université Côte d'Azur. He works on Behavioral and Experimental Economics and Finance, and complex system approach in Economics and Finance. His research has been published in such international journals as Economic Journal and Management Science.



### Juergen Huber

Juergen Huber is head of the Department of Banking and Finance at the University of Innsbruck, Austria, general manager of the Society for Experimental Finance, which he co-founded, and co-editor-in-chief of the Journal of Behavioral and Experimental Finance. He studied at Tulane University and University of Innsbruck and was visiting professor at Yale University, University of Vienna, and Universities in Thailand, Vietnam and Indonesia. His work was published in leading journals such as Science, AER, Management Science, European Economic Review, Games and Economic Behavior, etc. At the core of his research is the experimental exploration of market efficiency, drivers of bubbles and the potential impact of regulatory changes (e.g. incentive structures or transaction taxes) on markets.



### CHARLES PLOTT

Charles is the William D. Hacker Professor of Economics and Political Science at the California Institute of Technology. He is the Founder and Director of the Caltech Laboratory of Economics and Political Science (EEPS). He received his Ph.D degree from the University of Virginia. He holds diplôme Docteur honoris causa from L'université Pierre Mendès France and the Doctor of Letters honoris causa, Purdue University. He is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. He is a Distinguished Fellow of the American Economic Association, a fellow of the Society for the Advancement of Economic Theory, and a fellow of the Economic Society. He has served as president of the Society for the Advancement of Economic Theory, the Economic Science Association, the Southern Economic Association, the Public Choice Society, and the Western Economic Association.

His research is focused on the development, experimental testing and applications of theories of economics, public choice, political science and social choice. He developed an experimental methodology for the study of public economics, which rapidly emerged as new laboratory methods for studying markets. His laboratory methods are widely used throughout the world and his laboratory has served as a templet for the developments of over a hundred new laboratories. His research has produced some of the most basic scientific discoveries in experimental economics including principles governing convergence, information aggregation and stability of multiple market systems. In public choice and public economics his research initiated the experimental study of public goods and externalities together with how their determination is shaped by institutions such as the voting rule, agenda, property rights and free riding. Much of his work has explored policy applications of laboratory experimental methods where his research has had influence on landing rights, emission permits, complex auction processes, the environment, regulation (deregulation) and antitrust. He has published five books and approximately 200 research papers.



### RICHARD ROLL

Richard Roll is the Linde Professor of Finance at the California Institute of Technology. He is a professor emeritus at UCLA where he held the Joel Fried Chair at the Anderson School. He is a principal of Compensation Valuation, Inc., and a board member of Western Asset Mortgage Capital Corp. Roll's business experience also includes three years with the Boeing Company in the early 1960's where he worked on the Minuteman missile and the Saturn moon rocket. During 1985-87, he was a vice president of Goldman, Sachs & Co., where he founded and directed the mortgage securities research group. He directed Roll and Ross Asset Management for twenty years. He has been a consultant for many US corporations, law firms, and government agencies.

Roll has a bachelor's degree in aeronautical engineering from Auburn University and an MBA from the University of Washington. His academic career began in 1968 with a Ph.D from the University of Chicago. Subsequently, he was on the faculty at Carnegie-Mellon University, The European Institute for the Advanced Study of Management in Brussels, and the French business school, Hautes Etudes Commerciales, before joining UCLA in 1976. He retired from UCLA and joined Caltech in 2014.

Roll has published four books and more than 100 articles in peer-reviewed journals on a variety of topics. His 1968 doctoral thesis won the Irving Fisher Prize as the best American dissertation in economics. He has won the Graham and Dodd Award for financial writing (four times) and the Leo Melamed Award for the best financial research by an American business school professor. In 2009, he was named Financial Engineer of the Year by the International Association of Financial Engineers. He has received honorary doctorates from universities in both France and Germany. He is past president of the American Finance Association and is a fellow of the Econometric Society. He is currently or has been an associate editor of eleven different journals in finance and economics.



### VERNON SMITH

Dr. Vernon L. Smith was awarded the Nobel Prize in Economic Sciences in 2002 for his groundbreaking work in experimental economics. He has the George L. Argyros Chair in Finance and Economics, and is a Research Scholar in the Economic Science Institute at Chapman University. He is the President and founder of the International Foundation for Research in Experimental Economics since 1997.

Dr. Smith has authored or co-authored more than 290 articles and books on capital theory, finance, natural resource economics and experimental economics. He serves or has served on the board of editors of the American Economic Review, The Cato Journal, Journal of Economic Behavior and Organization, the Journal of Risk and Uncertainty, Science, Economic Theory, Economic Design, Games and Economic Behavior, The Independent Review and the Journal of Economic Methodology.

Dr. Smith is a distinguished fellow of the American Economic Association, and the 1995 Adam Smith Award recipient conferred by the Association for Private Enterprise Education. He was elected a member of the National Academy of Sciences in 1995, and received CalTech's distinguished alumni award in 1996. He has served as a consultant on the design of electric power systems in Australia and New Zealand and participated in numerous private and public discussions of regulatory reform in the United States. In 1997 he served as a Blue Ribbon Panel Member, National Electric Reliability Council.

Dr. Smith completed his undergraduate degree in electrical engineering at the California Institute of Technology, his master's degree in economics at the University of Kansas, and his Ph.D. in economics at Harvard.



### **GREGORY WAYMIRE**

Gregory Waymire received a bachelor's degree with honors from Indiana University (1978) and an MBA (1980) and PhD (1984) from the University of Chicago. He is currently the Asa Griggs Candler Professor of Accounting at Emory University and Research Professor at Chapman University. He has also served on the faculties of Washington University (St. Louis), Purdue University, and the University of Iowa. He has taught doctoral courses at Carnegie-Mellon University, University of Michigan, University of Minnesota, and University of Kentucky. His teaching involves both undergraduate and graduate students. He has served as President of the Financial Reporting Section of the American Accounting Association (1998-99) as well as Vice-President of Research (2008-10) and President (2011-12) of the American Accounting Association. His service at Emory has included two stints as a Senior Associate Dean at Emory's Goizueta Business School (1993-96 and 2003-04) and Emory University's President's Advisory Council on Promotion and Tenure (2000-03). He was co-chair of the faculty committee that designed Goizueta's PhD program (1999-2001) and he chaired the committee that revamped the school's promotion and tenure policies (2006).

His early research examined the capital market consequences of voluntary management earnings forecast disclosures, the development of accounting standards, insider trading based on earnings news, and the collection and provision of industry-wide information by trade associations. This work was published in a series of papers in the Journal of Accounting Research, The Accounting Review, Contemporary Accounting Research, the Journal of Accounting, Auditing and Finance, Financial Management, and the Journal of Accounting Literature.

His later work has focused mainly on the economic history of accounting and appeared in the Journal of Accounting Research, Contemporary Accounting Research, Journal of Accounting and Economics, The Accounting Review, Accounting, Organizations & Society, Accounting Horizons, and Proceedings of the National Academy of Sciences. This research has examined topics that include the relation between earnings and stock returns before 1910, the voluntary reporting of intangible assets in U.S. balance sheets before 1930, the impact of the first enforceable federal accounting mandates imposed on U.S. railroads in 1907, the association between corporate reporting transparency and stock price declines during the Market Crash of October 1929, and the recordkeeping foundations of accounting that extend back to the first human settlements in ancient Mesopotamia. His current research explores the foundations of accounting technologies such as double-entry bookkeeping.

## Attendee List

### **Conference Participants** Affiliation

Kara Bentley Chapman University Vineer Bhansali LongTail Alpha LLC Terry Burnham Chapman University Gabriele Camera Chapman University Michael Cooper University of Utah Brett Danaher Chapman University Mark DeSantis Chapman University Cary Deck University of Alabama

John Duffy University of California, Irvine
Daniel Friedman University of California, Santa Cruz

Darcy Fudge-Kamal Chapman University
Steve Gjerstad Chapman University
Nobuyuki Hanaki Université Côte d'Azur
Juergen Huber University of Innsbruck
Olivia Huseman Chapman University

Chad Kendall University of Southern California

Erik Kimbrough Chapman University
Dan Kovenock Chapman University

Suk Lee University of Southern California

Zhi Li Chapman University

Radhika Lunawat University of California, Irvine

Glenn Pfeiffer Chapman University

Andrew Pham Pacific Rim Capital Management
Charles Plott California Institute of Technology

David Porter Chapman University Steve Rassenti Chapman University

Richard Roll California Institute of Technology

Mark Schneider Chapman University

Han Seo California Institute of Technology

Tim Shields Chapman University Vernon Smith Chapman University Tom Turk Chapman University Greg Waymire **Emory University** Michelle Waymire Young + Scrappy Marc Weidenmier Chapman University Nat Wilcox Chapman University Abel Winn Chapman University

Hao Zhao California Institute of Technology

We welcome the participants of the 23rd Annual Visiting Graduate Student Workshop in Experimental Economics.