

MARK RUBINSTEIN

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EDUCATIONAL BACKGROUND

Preparatory Work: The Lakeside School, Seattle, 1956-1962

Undergraduate: Harvard College, 1962-1966
Major: Economics
A.B. Degree, Magna Cum Laude, June 1966

Graduate Studies: Stanford University, 1966-1968
Graduate School of Business
Area of Concentration: Finance
M.B.A. Degree, June 1968

UCLA, 1968-1971
Graduate School of Business
Field: Finance
Ph.D. Degree, December 1971

RELEVANT WORK EXPERIENCE

July 1967 - Sept 1967 Security Analyst
Capital Research and Management Company
Los Angeles, California

July 1968 - June 1969 Chief Economic Analyst
Commuter Centers, Inc.
Los Angeles, California

July 1969 - Sept 1969 Cost Accountant
Whitney Fidalgo Seafoods, Inc.
Seattle, Washington

April 1976 - June 1976 Member, Options Market-Maker
Pacific Stock Exchange
San Francisco, California

Feb 1981 - July 1984 Founding Principal and Executive Vice-President
Leland O'Brien Rubinstein Associates
Century City, California

July 1984 – July 1995 Founding Principal and Director
Leland O'Brien Rubinstein Associates
Los Angeles, California

Nov 1989 - July 1995 Director
SuperShare Services Corporation
Los Angeles, California

FINANCIAL CONSULTING ACTIVITY

Current:

Past:

Nov 1975	Pacific Stock Exchange (rules for underlying stocks for listing options)
Feb-Apr 1977	Philadelphia Stock Exchange (economic justification of options on market index)
Jan 1978-Mar 1979	Expert witness in Murray Case (security brokerage fraud)
Apr 1978-Jul 1982	Expert witness in Blank Case (security brokerage fraud)
Sep 1978-Jun 1979	Expert witness in Harris Case (security brokerage fraud)
Sep-Oct 1979	Technique for valuing options on bonds
Oct 1979-Feb 1981	Expert witness in Piron Case (security brokerage fraud)
Jul 1984-May 1994	Leland O'Brien Rubinstein Associates (general consulting)
Jul 1985-Dec 1995	Tradelink Corp. (general consulting)
Feb-May 1989	Citibank (analyze internal option-based transfer pricing mechanism)
Mar-Nov 1990	Expert witness in Bear Stearns v. Jardine
Mar-Jun 1990	Expert witness in CFTC v. International Trading Group
Aug-Nov 1990	Expert witness in CFTC v. Siegel Trading Company
Aug 1990-Jan 1991	Expert witness in City of Houston v. Analytic Investment Management
May 1991-Mar 1992	Expert witness in Weyerhaeuser v. Geewax, Terker
Jun 1991-Sep 1992	BARRA-NIKKO TOPS Advisory Board
Feb-Nov 1992	Expert witness in Spicer et al. v. CBOE et al.
Feb 1992-Sep 1992	Robertson, Stephens (valuation of debentures)
Aug 1993	Coopers & Lybrand (valuation of employee stock options)
Feb-Aug 1994	Intel Corporation (employee stock options)
May 1994-May 1997	BARRA (general consulting)
Oct 1994	Upjohn Corporation (option contract design and valuation)
Oct 1994-Jan 1997	Expert witness in Waters et al. v. IPMC et al.
Mar-Sep 1995	Valuation of General Motors preference shares
Jul-Aug 1995	Expert witness in Morton Salkind v. Lorraine C, Wang, et al.
Sep 1995-May 1996	Expert witness in Procter & Gamble v. Bankers Trust
May-Jun 1996	Matter of Kinder and Kinder (valuation of executive stock options)
Aug 1996	Imunex (valuation of convertible, callable debt)
Jul-Sep 1997	MTC Corporation matter
Nov 1996-Jan 1999	IRS estate tax matter (excess gifting to trust)
Feb-Mar 1998	CBOT v. SEC hearings (narrowed-based index futures and options)
Jan-Feb 1999	MJP v. BKP (inappropriate derivatives based hedge fund strategy)
Mar 1999-April 2000	IRS v. Chrysler (warrant valuation)
Sep 1999	Employee stock option valuation software for Arthur Andersen
Jan-Feb 2000	Employee stock option valuation for CISCO Systems
Feb 2000	CBOE, AMEX, PCX, PHX and NYSE class action multiple listing litigation
Apr 2000	Employee stock option plan for Navigant Consulting
Mar-Oct 2000	Portfolio insurance for a wealthy family
Aug 2000-Feb 2001	StructuredMarkets.com
Jan-Feb 2001	OPRA v Reuters (listing quotes on multiply-listed equity options)
Jul 2002-Dec 2004	Employee Stock Option Plan for CISCO Systems
Jul 2002-Apr 2003	Xilink v IRS (tax treatment of employee stock options)
Dec 2002-Mar 2004	Business purpose of variety of derivative transactions
Apr 2002-Apr 2003	Index options (Franchise Tax Board)
Nov 2003-Feb 2004	Analysis of Enron option transactions
Sep-Oct 2004	FASB presentation for expensing employee stock options for LECG
Jan-Oct 2005	Adjusting option terms for large extraordinary dividend
Feb-June 2005	Analysis of forwards and swaps hedging account for large investor
Jul 2004-Oct 2005	Analysis of Enron accounting for asset price risk

Jun 2006-Jun 2008	General Mills v. Franchise Tax Board (first trial)
Apr-June 2008	Valuation of Illiquid Convertible Preferred
Mar 2010-Apr 2010	General Mills v. Franchise Tax Board (second trial)

ACADEMIC POSITIONS

Current:

Jul 2006-present Full Professor, University of California, Berkeley

Past:

Jul 1970-Jun 1972	Teaching Associate, University of California, Los Angeles
Jul 1972-Mar 1975	Assistant Professor, University of California, Berkeley
Apr 1975-Jun 1975	Visiting Assistant Professor, University of Washington
Jul 1975-Jun 1976	Assistant Professor, University of California, Berkeley
Jul 1976-Jun 1980	Associate Professor, University of California, Berkeley
Jul 1980-Jun 1995	Full Professor, University of California, Berkeley
Jul 1995-Jun 2006	Paul Stephens Professor of Applied Investment Analysis, Berkeley

COURSES (at Berkeley only)

Current:

Business 230A (MFE) Fundamentals of Financial Economics (2001-2008, 2010)

Past:

Business 24/39D (UG)	How Christianity became the World's Dominant Religion (2007-2008)
Business 103 (UG)	Introduction to Corporate Finance (2007-2008)
Business 130 (UG)	Financial Management (1975, 1976(2))
Business 130G (UG)	Financial Policies of Business (1972(3), 1974, 1976)
Business 203 (MBA)	Financial Policies of Business (1995(2))
Business 230 (MBA)	Theory of Finance (1973, 1974(2))
Business 231 (MBA)	Corporate Financial Management (1975, 1976(3), 1977, 1980)
Business 233 (MBA)	Securities Markets and Investment Policies (1980(2), 1982, 1983, 1984(2), 1985-1991, 1992(2), 1993(2), 1994(2), 1995)
Business 234 (MBA)	Advanced Topics in Business Finance (1973, 1974)
Business 236/296 (MBA)	Seminar on Derivatives (1976-1978, 1981, 1982(2), 1983(2), F-1985-1988, 1990-1994, 1995(2), 1997-1998, 1999(2), 2000-2001)
Business 230C (MFE)	Fundamentals of Derivatives: Economic Concepts (2001-2009)
Business 237/238B (PHD)	Advanced Financial Theory (1973, 1978, 1980-1982)
Business 298	Special Topics (1995, 1997)

Business 230A was a newly created course in 2001 in the incipient year the Master of Financial Engineering (MFE) program.

Business 236 was developed into a new course subtitled "Options Markets" in 1976; Business 238B was developed into a new course covering continuous-time models in finance in 1981; in 1990, an extensive software package developed in conjunction with Gerard Gennotte was first used in Business 236; the course was renamed "Seminar on Derivatives" in 1994.

Business 24/39D is a new developed course in the Freshman/Sophomore seminar series concentrating on the period between the birth of Jesus and the death of Augustine.

DOCTORAL DISSERTATIONS CHAIRED

Jun 1973	Ramish Gupta: <i>"Price Level Accounting and the Behavior of Security Prices"</i>
Jun 1975	David Ng: <i>"Essays on the Effects of Information in Financial Markets"</i>
Jun 1976	Elaine Chen: <i>"Capital Asset Prices under Uncertain Inflation"</i>
Jun 1977	Robert Geske: <i>"The Valuation of Complex Options"</i>
Jun 1979	Stan Beckers: <i>"Empirical Studies of Alternative Option Pricing Models"</i>
Dec 1981	Mihir Bhattacharya: <i>"Tests of Option Pricing Models Using Transactions Data"</i>
Jun 1982	Yaacov Bergman: <i>"Pricing of Contingent Claims in Perfect and Imperfect Markets"</i>
Jun 1983	Jeremy Evnine: <i>"Three Essays in the Use of Option Pricing Theory"</i>
Dec 1986	Karen Peterson: <i>"Pricing of the Treasury Bond Futures Contract"</i>
Jun 1987	Anand Vijh: <i>"Four Essays in the Applications of Options Pricing Theory"</i>
Dec 1987	Amir Sheikh: <i>"Essays on Volatilities Implied by Option Prices"</i>
Jun 1988	Joseph Lee: <i>"Textile Export Quotas: Pricing, Management and Allocation"</i>
Dec 1988	Maayana Weissman: <i>"The Effect of Production-Technology Structures on Liquidity Premiums"</i>
Jun 1989	Indi Rajasingham: <i>"Essays on Contingent Claims"</i>
Jun 1992	Richard Lindsey: <i>"Assymetric Information and the Price Process"</i>
Dec 1996	Stewart Mayhew: <i>"Essays on Market Microstructure and Options"</i>
Jun 1997	Terrence Odean: <i>"Essays in Investor Behavior"</i>
Jun 1998	Nengjiu Ju: <i>"Essays in Corporate Finance and Derivatives Pricing"</i>
Jun 1999	Joel Vanden: <i>"Essays in Financial Economics"</i>
Jun 2000	Lionel Martellini: <i>"Three Essays in Asset Pricing Theory"</i>
Jun 2000	Kehong Wen: <i>"Essays on the Equilibrium Valuation of IPOs and Bonds"</i>

PROFESSIONAL ACTIVITIES

Associate Editorships or Advisory Boards of Journals:

Current:

Journal of Derivatives (1993-present)

Journal of Investment Management (2002-present)

Past:

Journal of Financial Economics (1973-1995)

Journal of Finance (1974-1988)

Management Science (1977-1978, 1984-1998)

Advances in Futures and Options Research (1986-1995)

Financial Analysts Journal (1988-2007)

Journal of Financial Engineering (1992-1998)

Net Exposure (1997-1998)

Journal of RISK (1999-2005)

Journal of Financial Research (1987-2002)

Review of Derivatives Research (1996-2002)

Journal of Portfolio Management (1985-2007)

Program Committees:

Western Finance Association (1978-1979, 1981, 1983-1987, 1991-1995)

Eastern Finance Association (2000)

Financial Management Association (2000)

European Finance Association (2000)

Selection Editor for the Papers and Proceedings issue of the *Journal of Finance* (1993)

Directorships of Finance Associations:

Western Finance Association (1985-1987) – elected

American Finance Association (1987-1989, 1994-1995) – elected

Institute for the Study of Security Markets (1987-1995)

Officer of American Finance Association:

Vice-President (1991)

President-Elect and Program Chairman (1992)

President (1993)

Senior Fellow of the International Association of Financial Engineers (1996-death)

Fellow of the American Finance Association (2000-death)

Chairman of the Financial Engineer of the Year Awards Selection Committee (1997)

Academic Advisory Group of the Pacific Stock Exchange (September 1991 - June 1992)

General Securities Examination, Series 2, NASD (July 1, 1981)

National Commodity Futures Examination, Series 3, NASD (June 24, 1985)

GRANTS (non-Berkeley)

- (1977-1978) National Science Foundation Grant SOC 77-18087 for "Pricing of Uncertain Financial Claims," awarded jointly with Mark Garman for one year, \$93,100
- (1978-1979) National Science Foundation Grant SOC 79-15314 for "Pricing of Uncertain Financial Claims," awarded jointly with Mark Garman for one year, \$93,100
- (1981) Institute for Quantitative Research in Finance grant for "Tests of Alternative Option Pricing Formulas Using All Reported CBOE Transactions and Quotes during the Period August 23, 1976 through August 31, 1978," \$9,000

AWARDS

- (1978) CBOE Pomerance Prize for Excellence in Options Research for "Option Pricing: A Simplified Approach" (awarded jointly with John Cox and Stephen Ross)
- (1982) Institute for Quantitative Research in Finance (third prize) for "Tests of Alternative Option Pricing Formulas"
- (1984-1985) Biennial Leo Melamed Prize for *Options Markets* (coauthored with John Cox) awarded by the editors of the *Journal of Business* for the most significant published work by a faculty member of a school of business
- (1985) Institute for Quantitative Research in Finance (first prize) for "Alternative Paths to Portfolio Insurance"
- (1985) Financial Analysts Foundation Graham and Dodd Plaque Award for the best paper to appear in the *Financial Analysts Journal* in 1985
- (1987) Institute for Quantitative Research in Finance (third prize) for "Derivative Assets Analysis"
- (1987) Named "Businessman of the Year" (one of 12) by *Fortune* magazine (December)
- (1988) Financial Analysts Foundation Graham and Dodd Scroll Award for excellence in financial writing awarded by the *Financial Analysts Journal*
- (1989) Financial Analysts Foundation Graham and Dodd Scroll Award for excellence in financial writing awarded by the *Financial Analysts Journal*
- (1995) Financial Engineer of the Year Award awarded by the International Association of Financial Engineers
- (1996) Institute for Quantitative Research in Finance (first prize) for "Recovering Probability Distributions from Option Prices"
- (2000) Elected to Derivatives Strategy Magazine's "Derivatives Hall of Fame"
- (2002) Financial Analysts Foundation Graham and Dodd Plague Award for the best paper to appear in the *Financial Analysts Journal* during 2001.
- (2002) Named to the "RISK Hall of Fame" by *Risk Magazine* in 2002
- (2003) Earl F. Cheit Teaching Award (Masters of Financial Engineering Program, Class of 2003)
- (2004) *Treasury and Risk Management Magazine*: Listed in "100 Most Influential People in Finance"

PUBLIC SERVICE

- Chairman of the Out-of-State Review Committee for a proposed new doctoral program in financial economics at the University of Louisiana at New Orleans (June 1983)

- Director of the NIKKO-LOR Research Project (for funding academic research in the area of dynamic portfolio strategies and derivative assets analysis, July 1989 to December 1993)
- Member of Out-of-State Review Committee for the ongoing doctoral program in financial economics at the University of Louisiana at New Orleans (March 1996)
- Committee for recommending new editors of the *Journal of Financial Engineering* (July 1998)

PAST UNIVERSITY SERVICE

- Member, Admissions Committee, San Francisco Program (1973-1974)
- Berkeley Coordinator for the Berkeley-Stanford Colloquium in Finance (1974-1976, 1978)
- Coordinator for Internal Workshops in Finance (1974-1976, 1978, Fall/1995, Spring/1997)
- Assistant Professor Representative (1975-1976)
- Member, Admissions Committee, Berkeley MBA Program (1976-1977)
- Program Chairman, Berkeley Program in Finance (Fall/1979, Spring/1980, Fall/1983, Fall/1991, Fall/1994, Fall/1995, Spring/2002)
- Program Chairman, Berkeley Program in Finance in Asia (1988)
- Program Director, Berkeley Program in Finance (1981-1984, 2001-2003)
- Chairman, Berkeley Finance Group (1983-1986)
- Member, Campus-wide IBM Microcomputer Grants Steering Committee (1984-1986)
- Chairman or Member, Business School Computer Policy Committee (1992-1994, 1997-1998)
- Member of Executive Committee of IBER (1993-1996)
- Database Coordinator, Berkeley Finance Group (1989-1997)
- Doctoral Advisor for Finance (1975-1980, 1990-1998)
- Member, Business School Doctoral Committee (1976-1980, July 1990-December/1998)
- Member, NASDAQ Fellowship Selection Committee (1996-1998)
- Member, Haas School P² Committee (1997-1999)
- Treasurer of the Berkeley Program in Finance (1991-2001)
- Alternative representing Berkeley for the Assembly of the Academic Senate (1999-2001)
- Member, Faculty/Ph.D. Computing Committee (2000-2001)
- Founder and Director, Berkeley Options Data Base (1978-1998)
- Finance Group Faculty Recruiting Chair (2004)
- Director of the Certificate in Financial Engineering Program (2001-2005)
- Faculty coordinator between the finance group and the MFE Program (2000-2006)

INVITED PAPERS AND LECTURES

- 1972:** University of Pennsylvania (Philadelphia)
University of California (Berkeley)
University of Chicago (Chicago)
Rochester University (Rochester)
Stanford University (Stanford)
- 1973:** Berkeley-Stanford Colloquium (Stanford)
Conference of the Institute of Management Sciences (Jerusalem)
Wells Fargo Conference on Capital Markets (San Francisco)
Bell Labs Conference on Capital Markets (Holmdel, New Jersey)
- 1974:** University of British Columbia (Vancouver)
Short Course of Options, Warrants and Hedging Models (San Francisco)
Carnegie-Mellon University (Pittsburg)
Conference of the American Finance Association
- 1975:** Hebrew University Conference (Ein Bokek, Israel)
University of Washington (Seattle)

- University of Pennsylvania (Philadelphia)
 Conference of the American Finance Association
- 1976:** University of Utah
- 1977:** Berkeley Workshop in Finance (Berkeley)
 Conference on Options Trading at New York University (New York)
 Conference of Western Economic Association
 Wells Fargo Conference in Finance (San Francisco)
 Meeting of Security Analysts of San Francisco (San Francisco)
- 1978:** Cornell University (Ithaca, New York)
 Bell Labs (Murray Hill, New Jersey)
 University of Washington (Seattle)
 University of British Columbia (Vancouver)
 University of California at Los Angeles (Los Angeles)
 Stanford Executive Course in Security Markets
 Stanford Seminar for Portfolio Managers
 Berkeley Seminar in Application Capital Market Theory (Berkeley)
 Berkeley Workshop in Economics (Berkeley)
- 1979:** Center D'Enseignement Supérieur des Affaires (Jouy-en-Josas, France)
 Universitat Graz (Graz, Austria)
 Erasmus University (Rotterdam, The Netherlands)
 Justus Leibig-Universitat (Geissen, Germany)
 Ecole Supérieure des Sciences Economiques et Commerciales (Cercy, France)
 Universitat Karlsruhe (Karlsruhe, Germany, week course on options)
 Faculte Universitaire Catholique de Mons (Mons, Belgium)
 Rijksuniversiteit (Groningen, The Netherlands)
 I.A.E. (Aix-en-Provence, France)
 Ecole Superieure des Sciences Economiques et Commerciales (Paris, France)
 Norwegian School of Economics and Business (Bergen, Norway)
 Oslo Institute of Business (Oslo, Norway)
 University of Texas at Austin (Austin)
 University of Texas at Houston (Houston)
- 1980:** Université Laval (Quebec, Canada)
 Berkeley Program in Finance (March)
 Berkeley Program in Finance (September)
 New York Investment Technology Association (New York)
 Business Week and Securities Week Conference [keynote speaker] (New York)
 San Francisco Conference on Put Expansion (San Francisco)
- 1981:** AMEX Conference on Options [keynote speaker] (New York)
 University of California at Los Angeles (Los Angeles)
 Western Finance Association
 University of Michigan at Ann Arbor [special lecturer] (Ann Arbor)
 Berkeley Program in Finance (September)
 University of Florida at Gainesville (Gainesville)
 Institute for Quantitative Research in Finance
- 1982:** New York University Conference on Options (New York)
 AMEX Conference on Options (New York)
 Louisiana State University (Baton Rouge)
 University of Southern California (Los Angeles)

- Financial Research Foundation of Canada [keynote speaker]
 Berkeley Program in Finance (Monterey, March)
 Financial Management Association [featured speaker]
- 1983:** AMEX Conference on Options (New York)
 Conference of the Institute of Management Sciences
 Berkeley Program in Finance (Silvarado, September)
- 1984:** Stanford University (Stanford)
 University of Wisconsin at Madison (Madison)
 Institute for Quantitative Research in Finance
- 1985:** AMEX Conference on Options (New York, March)
 Conference of the Institute of Management Sciences
 San Francisco Financial Analysts Society
 Toronto Options and Futures Society
 Financial Management Association [special tutorial on options]
 Berkeley Program in Finance (Monterey, October)
- 1986:** Northeastern University (Chicago)
 University of Wisconsin at Madison (Madison)
 Wells Fargo Client Conference (Pebble Beach)
 Institute for Quantitative Research in Finance [special lecture]
 UCLA Business Forecasting Conference (Los Angeles)
- 1987:** Berkeley Program in Finance in Asia (Japan, May)
 Quotron (Los Angeles, talk on constructing data bases)
 Mitsubishi Trust Study Group (Berkeley, March)
 Berkeley Program in Finance (Silvarado, September)
 NIBA Study Group (San Francisco, December)
- 1988:** Financial Investment Technology Course (Berkeley, January)
 Nikko-LOR Portfolio Insurance Conference (Tokyo, January)
 Corporate Finance Seminar (San Francisco, March)
 AMEX Conference on Options (New York, March)
 Market Crash Symposium (Berkeley, March)
 Berkeley Program in Finance (Santa Barbara, March)
 Berkeley Program in Finance in Asia (Singapore, June)
 AMEX European Options Conference (Paris, October)
 NYU Crash Anniversary Conference (New York, October)
 Institute for Quantitative Research in Finance (Tokyo, November)
 NIBA Study Group (San Francisco, December)
- 1989:** Financial Investment Technology Course (Berkeley, January)
 IIR Conference (Florida, February)
 AMEX Conference on Options (New York, March)
 New York Institutional Options and Futures Society (New York, April)
 Advanced Investment Technology Course (Tokyo, April)
 Wharton-Philadelphia Stock Exchange Conference (Philadelphia, May)
 University of California at Los Angeles (Los Angeles, June)
 IIR Conference (London, July)
 IBM Finance Specialists Course (Oakland, August)
 Berkeley Program in Finance (Monterey, September)
- 1990:** Financial Investment Technology Course (Berkeley, January)
 Nikko Securities three-day options course (Tokyo, January)

- AMEX Conference on Options (New York, March)
 University of Warwick (Coventry, September)
 3rd Annual Texas Finance Symposium (Houston, October) [keynote speaker]
 Q Group of Security Analysts of San Francisco (San Francisco, November)
 AMEX Conference on Options (Stockholm, December)
 Midland Montagu Conference (London, December)
 Devon Systems International Conference (London, December)
- 1991:** Financial Investment Technology Course (Berkeley, January)
 Berkeley Program in Finance (Lake Tahoe, March)
 Portland State University (Portland, April)
 LOR Two-Day Seminar on Exotic Options (New York, June)
 Berkeley Program in Finance (Monterey, September)
 University of Maryland (College Park, October)
- 1992:** Financial Investment Technology Course (Berkeley, January)
 IRR Conference (London, January)
 Berkeley Faculty Alumni Colloquium (Berkeley, April)
 SimCorp Conference (Copenhagen, June)
 Financial Management Association (San Francisco, October) [tutorial]
 Northwestern (Chicago, November)
 Chicago Board Options Exchange (Chicago, November) [press conference]
 Pension Asset Liaisons (San Francisco, November)
- 1993:** Financial Investment Technology Course (Berkeley, January)
 Chicago Board Options Exchange (Phoenix, January)
 Society of Quantitative Analysis (New York, May)
 University of British Columbia (Vancouver, May)
 University of Toronto (Toronto, June)
 Golden Gate University (San Francisco, October)
 Duke University (Durham, November)
 RISK Magazine Conference (London, December)
 University of New South Wales (Sydney, December) [keynote speaker]
 Nikko Securities Conference (Tokyo, December)
- 1994:** American Finance Association (Boston, January) [presidential address]
 Financial Investment Technology Course (Berkeley, January)
 Chicago Board Options Exchange (Chicago, January)
 American Stock Exchange (New York, January)
 IRR One-Day Course on Options (Paris, February)
 ICBI Conference (Paris, February)
 International Association of Financial Engineers (San Francisco, March)
 University of California at Berkeley (Berkeley, March)
 AMEX Conference on Options (New York, March)
 Financial Accounting Standards Board (Norwalk, Connecticut, April)
 University of California at Irvine (Anaheim, April)
 RISK Magazine Conference (New York, April)
 ITAN Two-Day Course on Options (Mexico City, May)
 Stanford University (Stanford, May)
 MIT (Cambridge, May) [special year-end seminar speaker]
 New York Mercantile Exchange (New York, May)
 BARRA Annual Equity Conference (Pebble Beach, June)
 Western Finance Association (Santa Fe, June) [distinguished speaker]
 RISK Magazine Two-Day Course on Options (New York, June)

- RISK Magazine Two-Day Course on Options (London, June)
RISK Magazine Two-Day Course on Options (Johannesburg, July)
IRR Conference (London, July)
University of Wisconsin (Madison, August)
Washington University (St. Louis, September)
Berkeley Program in Finance (Ojai Valley, September)
IIR Conference (London, October)
New York University Conference (New York, November)
BARRA Exotic Options Seminar (London, December)
RISK Magazine Conference (London, December)
- 1995:** Financial Investment Technology Course (Berkeley, January)
ICBI Conference (Paris, April)
CBOT Conference (Chicago, May)
APLBUG (Palo Alto, June)
Chicago Quantitative Alliance (Chicago, September)
One-Day Options Course (Napa Valley, September)
Berkeley Program in Finance (Napa Valley, September)
Institute for Quantitative Research in Finance (Palm Springs, October)
International Association of Financial Engineers (New York, November) [keynote]
International Association of Financial Engineers (New York, November)
IRR Conference (New York, November)
One-Day Options Course (Sao Paulo, Brazil, December)
Conference in Securities and Financial Markets (Taiwan, December) [keynote]
- 1996:** Financial Investment Technology Course (Berkeley, January)
CBOE/CBOT/LIFFE Conference (West Palm Beach Florida, January)
Yale University (New Haven, January)
UCLA (Los Angeles, February)
BARRA Conference (Pebble Beach, March)
University of Mannheim (Mannheim, Germany, March)
IRR Conference (Frankfurt, March)
Strategic Decisions Group (Palo Alto, April)
Universidad Carlos III (Madrid, April)
ICBI Conference (Paris, April)
University of Iowa (Iowa City, May)
BARRA Equity Conference (Pebble Beach, June)
Mathematics Sciences Research Institute (Berkeley, June)
Columbine/Instinet Quantitative Seminar (Colorado Springs, August)
Berkeley Breakfast Club (Berkeley, September)
ITAM (Mexico City, September)
Berkeley Program in Finance (Santa Barbara, September)
BARRA Conference (Tokyo, November)
Duke University/UNC (Durham, December)
University of Texas at Austin (Austin, December)
- 1997:** Financial Investment Technology Course (Berkeley, January)
California Investment Association (Berkeley, March)
ICBI Conference (Paris, April)
Pacific Basin Business Conference (Singapore, July) [keynote speaker]
SIMEX (Singapore, July)
Chinese Finance Association (Berkeley, August)
IAFE Award Dinner (New York, September)

- Berkeley Course on Pedagogy (Berkeley, September)
 UC Davis Conference on 1987 Market Crash (Davis, October)
 BARRA (Berkeley, October)
 IIR Conference (Miami, October)
 WBR Conference (Palm Beach, October)
 BARRA (Sydney, November)
 Q-Group (Sydney, November)
 Flemings (London, November)
 RISK Summit (London, November)
 Berkeley Finance Seminar (Berkeley, December)
- 1998:** Financial Investment Technology Course (Berkeley, January)
 Q-Group (Palm Beach, March)
 ICBI Conference (Paris, April)
 RISK Summit (Washington, June)
 BARRA (Pebble Beach, June)
 MATLAB Financial Engineering Conference (New York, June)
 RISK Options Courses (Johannesburg, Sidney, September)
 Q-Group (Sidney, September)
 Macquarie Bank (Sydney, September)
 RISK Options Courses (London, New York, October)
 London Business School (London, October)
 Barclay's Global Investors Course (San Francisco, October)
 RISK (Geneva, October, *by video conference*)
 GARP (San Francisco, November)
- 1999:** Financial Investment Technology Course (Berkeley, January)
 American Actuarial Society (New York, January)
 APLBUG (Menlo Park, February)
 New York University (New York, February)
 Mathematical Finance Day (Boston University, April)
 San Francisco State University (San Francisco, May) [keynote speaker]
 Oregon State University (Corvallis, May)
 BARRA (Pebble Beach, June)
 Pedagogy Seminar (Berkeley, September)
 Financial Management Association (Orlando, October)
 Berkeley Program in Finance (Napa, November) [debate on behavioral finance vs Thaler]
 Center for Financial Studies (Frankfurt, December)
 Goethe-University (Frankfurt, December)
- 2000:** Financial Investment Technology Course (Berkeley, January)
 Neyman Seminar in Department of Statistics (Berkeley, February)
 Lecture on rational markets (Tel Aviv, June)
 Two-day course on advanced derivatives (Tel Aviv, June)
 Two-day course on introductory derivatives (Athens, June)
 Doctoral seminar on finance (Athens, June)
 European Financial Management Association (Athens, June)
 Indiana University (Bloomington, September)
- 2001:** Financial Investment Technology Course (Berkeley, January)
 Mathematical Sciences Research Institute (Berkeley, May)
 BARRA (Pebble Beach, June)
 UC Office of the Treasurer (Oakland, August)
 Los Angeles Society of Financial Analysts (Los Angeles, October)

- 2002:** Financial Investment Technology Course (Berkeley, January)
 Legal Economics and Consulting Group (Atlanta, January)
 Berkeley Program in Finance, Introduction of Harry Markowitz (Napa, March)
 Berkeley Program in Finance (Napa, March)
 Haas MFE Graduation, Introduction of Robert C. Merton (Berkeley, March)
 IAFE Annual Meeting (New York, May)
 New York University (New York, May)
 BARRA (Pebble Beach, June)
 NY Society of Quantitative Analysts (New York, June) [keynote speech]
- 2003:** Financial Investment Technology Course (Berkeley, January)
 Haas MFE Graduation, Introduction of Myron Scholes (Berkeley, March)
 RISK conference (Boston, June) [plenary speech]
 AIMR conference at Northwestern (Chicago, August) [keynote speech]
 University of Washington ESO Conference (Seattle, September)
 University of Denver (Denver, October) [keynote speech]
 RISK conference (New York, November) [keynote speech]
 RISK course on derivatives (New York, November)
 Securities Analysts of San Francisco (San Francisco, December)
- 2004:** Certificate of Financial Engineering Course (Berkeley, January)
 Short Executive Course on Options and Futures (Berkeley, February)
 Council on Executive Compensation (San Francisco, March)
 University of Pennsylvania (Philadelphia, May) [keynote speech]
 FASB Round Table (Palo Alto, June) [one of many participants]
 Haas Ph.D. Class (talk on "How to be a Great Teacher") (Berkeley, September)
 RISK conference (New York, November)
 Columbia University (New York, November)
 RISK conference (London, November)
 FactSet Portfolio Analytics conference (Miami, November)
 Berkeley Finance Club (Berkeley, November)
- 2005:** Certificate of Financial Engineering Course (Berkeley, January)
 Decision Science Institute (San Francisco, November)
- 2006:** Certificate of Financial Engineering Course (Berkeley, January)
 San Francisco Society of Security Analysts & GARP (San Francisco, February)
 Financial Executives International (San Francisco, March)
 Haas MFE Graduation, Introduction of Bill Sharpe (Berkeley, March)
 Journal of Investment Management Conference (San Francisco, March)
 Research Affiliates Conference (Rancho Mirage, April)
- 2007:** Americ Azevedo's Class on Non-Violence (Berkeley, May)
 International Real Options Conference (keynote, June)
 Ohio State University (November)
- 2008:** WHU Conference (Vallendar, Germany, January)
 Ph.D. Commencement Address (Berkeley, Haas School, May)
 Borch Lecture (Bergen, Norway, September)
 Norwegian School of Business (Bergen, Norway, September)
 Americ Azevedo's Class on Non-Violence (Berkeley, September)
- 2009:** Americ Azevedo's Class on Non-Violence (Berkeley, July)
 Americ Azevedo's Class on Non-Violence (Berkeley, October)

2010: Americ Azevedo's Class on Non-Violence (Berkeley, June)

Total = 306

PUBLICATIONS

1. (1970) "Addendum," in *Portfolio Selection: Efficient Diversification of Investments*, by Harry Markowitz (Yale University Press), pp. 308-315
2. (1972) "Equilibrium in the Pricing of Capital Assets, Risk-Bearing Debt Instruments and the Question of Optimal Capital Structures: A Comment" (with Y. Imai), *Journal of Financial and Quantitative Analysis* (September)
3. (1973) "The Fundamental Theorem of Parameter-Preference Security Valuation" (*Essay 1 of Dissertation*), *Journal of Financial and Quantitative Analysis* (January)
4. (1973) "A Comparative Statics Analysis of Risk Premiums" (*Essay 2 of Dissertation*), *Journal of Business* (October)
5. (1973) "A Mean-Variance Synthesis of Corporate Financial Theory" (*Essay 3 of Dissertation*), *Journal of Finance* (March)
[reprinted in *Modern Developments in Corporate Finance*, edited by Stewart Myers (Praeger 1976), reprinted in *Capital Market Equilibrium and Efficiency*, edited by James Bicksler (D.C. Heath) and reprinted in *Financial Analysis and Planning: Theory and Applications*, edited by Cheng F. Lee (Addison Wesley 1983)]
6. (1973) "Corporate Financial Policy in Segmented Securities Markets" (*Essay 4 of Dissertation*), *Journal of Financial and Quantitative Analysis* (December)
7. (1973) "Jan Mossin's Theory of Financial Markets," *Bell Journal of Economics and Management Science* (Autumn)
8. (1974) "An Aggregation Theorem for Securities Markets," *Journal of Financial Economics* (October)
[reprinted in *Asset Pricing Theory and Tests*, edited by Robert Grauer (Elsevier Science 2002)]
9. (1975) "Speculation and Information in Securities Markets" (with Jack Hirshleifer), *Proceedings -- XX International Meeting of the Institute of Management Sciences*
10. (1975) "Securities Market Efficiency in an Arrow-Debreu Economy," *American Economic Review* (December)
11. (1976) "The Irrelevancy of Dividend Policy in an Arrow-Debreu Economy," *Journal of Finance* (September)
12. (1976) "The Strong Case for the Generalized Logarithmic Utility Model as the Premier Model of Financial Markets," *Journal of Finance* (May)
[a considerably expanded version appears in *Financial Decision Making Under Uncertainty*, edited by Haim Levy and Marshall Sarnat (Academic Press 1977)]
13. (1976) "The Valuation of Uncertain Income Streams and the Pricing of Options," *Bell Journal of Economics* (Autumn)
[reprinted in *Frontiers of Modern Financial Theory*, edited by Sudipto Bhattacharya and George Constantinides (Rowman and Littlefield 1989); reprinted in *Asset Pricing Theory and Tests*, edited by Robert Grauer (Elsevier Science 2002); reprinted in *Handbook of Quantitative Finance and Risk Management*, edited by Cheng-Fee Lee and Alice C.

Lee (Springer 2010)]

14. (1978) "Competition and Approximation," *Bell Journal of Economics* (Spring)
15. (1979) "Option Pricing: A Simplified Approach" (with John Cox and Stephen Ross), *Journal of Financial Economics* (September)
[1978 winner of Pomeranze Prize of the Chicago Board Options Exchange]
[reprinted in *Dynamic Hedging: A Guide to Portfolio Insurance*, edited by Don Luskin (John Wiley and Sons 1988), in *Readings in Futures Markets* published by the Chicago Board of Trade, Vol. VI, 1991, in *The Handbook of Financial Engineering*, edited by Cliff Smith and Charles Smithson (Harper and Row 1990), in *Vasicek and Beyond: Approaches to Building and Applying Interest Rate Models*, edited by Risk Publications, Alan Brace, 1996, in *The Debt Market*, edited by Stephen Ross and Franco Modigliani (Edward Lear Publishing, 2000), in *The International Library of Critical Writings in Financial Economics: Options Markets*, edited by G.M. Constantinides and A.G. Malliaris (Edward Lear Publishing, 2000), in *Speculation and Financial Markets*, edited by Liam Gallagher and Mark Taylor (Edward Elgar Publishing, 2001), and in *International Library of Financial Econometrics*, edited by Andrew Lo (Edward Elgar Publishing 2007)]
16. (1979) "An Economic Evaluation of Organized Options Markets," *Journal of Comparative Law and Securities Regulation* (June)
17. (1981) "A Discrete-Time Synthesis of Financial Theory," *Research in Finance*, Volume 3
18. (1981) "Efficiency of the Market for Racetrack Betting," (with D. Hausch and W. Ziemba), *Management Science* (December)
[reprinted in *Efficiency of Racetrack Betting Markets*, edited by Donald Hausch, Victor Lo and William Ziemba (Academic Press 1995)]
19. (1981) "Replicating Options with Positions in Stock and Cash" (with Hayne Leland), *Financial Analysts Journal* (July/August)
[reprinted in *Dynamic Hedging: A Guide to Portfolio Insurance*, edited by Don Luskin (John Wiley and Sons 1988), in *Readings in Futures Markets* published by the Chicago Board of Trade, Vol. VI, 1991, and reprinted in the 50th Anniversary Issue of the *Financial Analysts Journal* (January/February 1995), selected as one of the 22 best articles out of the 3200 published in the Journal during its 50 year history]
20. (1982) "A Survey of Alternative Option Pricing Models" (with John Cox) in *Option Pricing: Theory and Applications*, edited by Menachem Brenner (Lexington Books, pp. 3-33)
21. (1983) "Displaced Diffusion Option Pricing," *Journal of Finance* (March)
22. (1984) Three articles in *PC Magazine* (with Stephen Lewis):
 - "Meet the New APL" (February 21)
 - "APL Does the Job" (March 6)
 - "APL: A Language for Modern Times" (April 3)
23. (1984) "A Simple Formula for the Expected Rate of Return of an Option Over a Finite Holding Period," *Journal of Finance* (December)
24. (1984/5) Three articles in *Intermarket* (with John Cox):
 - "Determinants of Option Value" (December 1984)
 - "Why Investors Use Options" (January 1985)
 - "An Exact Option Pricing Formula" (February 1985)

25. (1985) *Options Markets* (with John Cox), Prentice-Hall (translated Japanese edition, 1989)
 [1984-1985 winner of the Biennial Leo Melamed Prize awarded biennially to the most significant published work by a faculty member in a school of business]
26. (1985) "Alternative Paths to Portfolio Insurance," *Financial Analysts Journal* (July/August)
 [1985 winner of the Graham and Dodd Plaque Award of the Financial Analysts Federation and 1985 first prize winner of the Institute for Quantitative Research in Finance]
 [reprinted in *Dynamic Hedging: A Guide to Portfolio Insurance*, edited by Don Luskin (John Wiley and Sons 1988) in *Readings in Options and Futures*, Institute for Chartered Financial Analysts, 1988, in *Readings in Futures Markets*, Vol. VI, published by the Chicago Board of Trade, 1991, and in *The Financial Derivatives Reader*, Kolb Publishing Company, 1992]
27. (1985) "Nonparametric Tests of Alternative Option Pricing Models Using All Reported Trades and Quotes on the 30 Most Active CBOE Option Classes from August 23, 1976 through August 31, 1978," *Journal of Finance* (June)
 [1982 third prize winner of the Institute for Quantitative Research in Finance]
 [reprinted in *The International Library of Critical Writings in Financial Economics: Options Markets*, edited by G.M. Constantinides and A..G. Malliaris (Edward Lear Publishing, 2000)]
28. (1987) "The Value of Information in Personal and Impersonal Markets" (with Jeffrey Jaffe) in *Modern Finance and Industrial Economics*, edited by Tom Copland (Basil Blackwell)
29. (1987) "Derivative Assets Analysis," *Journal of Economic Perspectives* (Fall)
 [1987 third prize winner of the Institute for Quantitative Research in Finance]
 [reprinted in *The Financial Derivatives Reader*, Kolb Publishing Company, 1992]
30. (1987) "The Berkeley Options Data Base: A Tool for Empirical Research" (with Anand Vijh), *Advances in Futures and Options Research* (Volume 2, JAI Press, Inc.)
31. (1987) "Letter to the Editor," *Financial Analysts Journal* (November/December)
32. (1988) "Portfolio Insurance and the Market Crash," *Financial Analysts Journal* (January/February)
 [1988 winner of a Graham and Dodd Scroll Award of the Financial Analysts Federation]
 [reprinted in *The Financial Derivatives Reader*, Kolb Publishing Company, 1992]
33. (1988) "The Evolution of Portfolio Insurance" (with Hayne Leland) in *Dynamic Hedging: A Guide to Portfolio Insurance*, edited by Don Luskin (John Wiley and Sons)
34. (1988) "A Case of Confused Identity" (under the nom de plume of Edward Seidenverg), *Financial Analysts Journal* (July/August)
35. (1988) "Comments on the Market Crash: Six-Months After" (with Hayne Leland), *Journal of Economic Perspectives* (Summer)
 [reprinted in *Crashes and Panics: The Lessons from History*, edited by Eugene White (Dow Jones-Irwin 1990)]
36. (1989) "Market Basket Alternatives," *Financial Analysts Journal* (September/October)
 [cover article]
 [1989 winner of a Graham and Dodd Scroll Award of the Financial Analysts Federation]
 [reprinted in *The Financial Derivatives Reader*, Kolb Publishing Company, 1992]
37. (1991) Eight articles in *RISK*:

- "Pay Now, Choose Later" (February)
 "Options for the Undecided" (April)
 [reprinted in *From Black-Scholes to Black Holes: New Frontiers in Options*, Risk Magazine, Ltd., 1992]
- "Two in One" (May)
 "One for Another" (July)
 [reprinted in *From Black-Scholes to Black Holes: New Frontiers in Options*, Risk Magazine, Ltd., 1992]
- "Breaking Down the Barriers" (with Eric Reiner, September)
 [reprinted in *Derivatives Pricing: The Classic Collection*, Risk Books, 2004]
- "Unscrambling the Binary Code" (with Eric Reiner, October)
 "Somewhere Over the Rainbow" (November)
 "Double Trouble" (December-January)
38. (1991) "Continuously Rebalanced Investment Strategies," *Journal of Portfolio Management* (Fall)
 [reprinted in *Streetwise: The Best of the Journal of Portfolio Management*, edited by Peter L. Bernstein and Frank J. Fabozzi (Princeton University Press 1997)]
39. (1992) "Merton Miller's Financial Innovations and Market Volatility," *Journal of Finance* (June)
40. (1992) "Guiding Force," in *From Black-Scholes to Black Holes: New Frontiers in Options*, Risk Magazine, Ltd. (November)
41. (1994) "Implied Binomial Trees," *Journal of Finance* (July)
 [published paper of presidential address to the American Finance Association]
 [reprinted in *Research Symposium Proceedings*, Chicago Board of Trade, 1996 and in *The International Library of Critical Writings in Financial Economics: Options Markets*, edited by George Constantinides and A..G. Malliaris (Edward Lear Publishing 2000) and reprinted in *Continuous-Time Methods and Market Microstructure*, edited by Andrew Lo (Edward Elgar Publishing 2007)]
42. (1994) "Supershares," chapter in *Handbook of Equity Derivatives*, edited by Francis, Toy and Whittaker, published by Irwin Professional Publications
43. (1994) "Return to Oz," *RISK* (November)
 [reprinted in *Over the Rainbow*, Risk Magazine, Ltd., 1995]
44. (1995) "As Simple as One-Two-Three!" *RISK* (January)
 [reprinted in *Over the Rainbow*, Risk Magazine, Ltd., 1995]
45. (1995) "On the Accounting Valuation of Employee Stock Options", *Journal of Derivatives* (Fall)
46. (1996) "Reconstruction of the Probability Density Function Implicit in Option Prices from Incomplete and Noisy Data," (with R.J. Hawkins and G.J. Daniell) in *Maximum Entropy and Bayesian Methods* edited by K. Hanson and R. Silver (Kluwer Academic)
47. (1996) "Recovering Probability Distributions from Option Prices" (with Jens Jackwerth), *Journal of Finance* (December)
 [1995 first prize winner of the Institute for Quantitative Research in Finance]
 [reprinted in *Research Symposium Proceedings*, Chicago Board of Trade, 1996]

48. (1998) "Edgeworth Binomial Trees," *Journal of Derivatives* (Spring)
49. (1998) *Derivatives: A PowerPlus Picture Book* (text with software), published by In-The-Money; hard bound version without software but with printed glossary, *Rubinstein on Derivatives*, published in 1999 by Risk Publications (London); translated Italian edition, 2005.
- [reviewed in *Journal of Derivatives* (Summer 1999), *Futures and OTC World* (July 1999), *Derivatives Strategy Magazine* (August 1999), *Financial Engineering News* (October 1999), *Journal of Finance* (December 1999), *Review of Financial Studies* (Spring 2000), *European Financial Management* (March 2000), *Journal of Financial Education* (Spring 2000), *Financial Analysts Journal* (May/June 2000)]
50. (1999) "Comment on 'Computation of Deterministic Volatility Surfaces'," *International Journal of Applied and Theoretical Finance* (Summer)
51. (1999) Two articles in *Derivatives Strategy Magazine*
- "The World According to Mark Rubinstein: Interview" (July)
- "The Real-World Pitfalls of Portfolio Insurance" (September)
52. (2000) "On the Relation between Binomial and Trinomial Option Pricing Models," *Journal of Derivatives* (Winter)
53. (2001) "Derivatives Performance Attribution," *Journal of Financial and Quantitative Analysis* (March)
54. (2001) "Rational Markets? Yes or No: The Affirmative Case," *Financial Analysts Journal* (May-June)
- [2001 winner of the Graham and Dodd Plaque Award of the Financial Analysts Federation]
[summarized and reviewed in *Economic Intuition* (Summer 2001)]
55. (2001) "Comments on the 1987 Stock Market Crash: 11 Years Later" in *Risks in Investment Accumulation Products of Financial Institutions*, published by The Society of Actuaries
56. (2002) "Markowitz's "Portfolio Selection": A Fifty-Year Retrospective," *Journal of Finance* 57, No. 3 (June 2002), pp. 1041-1045.
57. (2003) "All in All, It's Been a Good Life," in *The Growth of Modern Risk Management: A History*, Risk Books (July).
58. (2003-2006) "Great Moments in Financial Economics:
- I. Present Value," *Journal of Investment Management* (First Quarter 2003)
 - II. Modigliani-Miller Theorem," *Journal of Investment Management* (Second Quarter 2003)
 - III. Short-Sales and Stock Prices," *Journal of Investment Management* (First Quarter 2004)
 - IV. The Fundamental Theorem (Part I)," *Journal of Investment Management* (Fourth Quarter 2005)
 - IV. The Fundamental Theorem (Part II)," *Journal of Investment Management* (First Quarter 2006)
59. (2005) "Recovering Probabilities and Risk Aversion from Options Prices and Realized Returns" (with Jens Jackwerth) in *The Legacy of Fischer Black*, edited by Bruce Lehman, Oxford University Press.
60. (2006) *A History of the Theory of Investments: My Annotated Bibliography*, Wiley (March)
- [translated and published in Chinese (2009)]
61. (2006) "Bruno de Finetti and Mean-Variance Portfolio Selection," *Journal of Investment Management* (Third Quarter)

62. (2006) "Forward to *Multi-moment Asset Allocation and Pricing Models*," edited by Emmanuel Jurczenko and Bertrand Maillet, Wiley.

BOOKS IN PROGRESS

The New Gospel

Christus Invictus! how Christianity became the world's dominant religion

UNPUBLISHED PAPERS

1. (1970) "Portfolio Theory in Perspective," UCLA: unpublished survey of academic research in financial markets from 1951-1970, surveying over 500 articles and books
2. (1983) "Displaced Diffusion Option Pricing: An Empirical Examination" (with Jeremy Evnine)
3. (1985) "Supplement to Options Markets: Problems and Answers"
4. (1987) "Reconstructing the S&P500 Index"
5. (1987) "The Wildcard Option Attached to American Spot Index Options"
6. (1988) "Simple Models of the Bid-Ask Spread"
7. (1989) "Justification of SuperTrust 4(2) and 22(d) Exemptions sought under Section 6(c) of the 1940 Investment Company Act" (with Hayne Leland)
8. (1990) "The SuperTrust"
9. (1992) "Exotic Options" (with Eric Reiner)
10. (1999) "Self-Publishing in Finance: The Story of *Derivatives: A PowerPlus Picture Book*"
11. (2001) "Recovering Stochastic Processes from Option Prices" (with Jens Jackwerth)
12. (2004) "Employee Stock Options: Getting the Accounting Right"
13. (2004) "Enron-LJM1 Transactions"
14. (2004) "Accounting for Employee Stock Options," co-authored with Richard Stanton, unpublished working paper (June)

COMPUTER PROGRAMS

1. (1993) Options and Futures Trading Simulator, Version 2.0
2. (1998) Rubinstein's Options Calculator, Version 1.0 (with assistance of Rick Butterworth and Jeff and Matt Bohn)
3. (1998) MATLAB for Derivatives, Version 1.0 (programmed by Gregory Portmann)
4. (2004) Rubinstein's Options Calculator: Internet Version (with assistance of Rick Butterworth)