Curriculum Vitae Yair Tauman December 2014

Personal: Date of Birth : January 20, 1948

Place of Birth : Rechovot, Israel

Citizenship : Israel, Permanent resident of USA (since 1988)

Addresses: Office (Israel) : Arison School of Business and

Zell Entrepreneurship Program

The Interdisciplinary Center (IDC), Herzliya

Office (USA) : Department of Economics,

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Education:

B.Sc. Mathematics and Statistics (with distinction), 1972, The Hebrew University of Jerusalem, Israel.

M.Sc. Mathematics (with distinction), 1974, The Hebrew University of Jerusalem, Israel. Thesis: *Values of nondifferentiable games*. Advisor: Robert Aumann

Ph.D. Mathematics, 1979, The Hebrew University of Jerusalem, Israel. Fields of Concentration: Game Theory, Values of Non Atomic Games. Thesis: *Values of Games with a Continuum of Players*. Advisor: Robert Aumann.

Awards:

- 1. Orbach prize in Mathematics, 1974, for distinguished Master Thesis, Jerusalem.
- 2. Xerox Research Professor, J.L. Kellogg Graduate School of Management, Northwestern University, Evanston, Illinois (1982-1983).
- 3. 1985 Oded Levin Prize (awarded by the Operations Research Society of Israel) to the paper "An Application of the Aumann-Shapley Prices for Cost Allocation in the Transportation Problems" (1984) by D. Samet, Y. Tauman and I. Zang.

Editorial Responsibility:

Associated Editor of International Journal of Game Theory (1991-1994).

Associated Editor of Games and Economic Behavior (1990-1992).

Conference Co-Organizer:

- 1987 Summer Conferences in Game Theory and Its Applications The Ohio State University
- 1988 Summer Conferences in Game Theory and Its Applications The Ohio State University
- 1989 Summer Conferences in Game Theory and Its Applications The Ohio State University
- 1990 The First Game Summer Theory Festival State University of New York at Stony Brook
- 1991 The Second Game Theory Summer Festival State University of New York at Stony Brook
- 1992 The Third Game Theory Summer Festival State University of New York at Stony Brook
- 1993 (1) The Fourth Game Theory Summer Festival State University of New York at Stony Brook (2) Game Theory and Economic Applications, Valencia, Spain (June) (3) Chairman and Organizer of the 20th E.A.R.I.E. Annual Conference, Tel Aviv, Israel (September)
- 1994 (1) The Fifth Game Theory Summer Festival State University of New York at Stony Brook (2) Implementation and Issues in Game Theory, Valencia, Spain (June)
- 1995 (1) The Sixth Game Theory Summer Festival State University of New York at Stony Brook (2) Workshop on Strategic Equilibria and Applications, Valencia, Spain (July)
- 1996 (1) The Seventh Game Theory Summer Festival State University of New York at Stony Brook (2) Topics in Game Theory and Applications, Valencia, Spain (June)
- 1997 (1) The Eighth Game Theory Summer Festival State University of New York at Stony Brook (2) Topics in Game Theory and Applications, Valencia, Spain (June)
- 1998 (1) The Ninth Game Theory Summer Festival State University of New York at Stony Brook (2) Communication and Repetition, Issues in Game Theory, Valencia, Spain (June)
- 1999 The Tenth Game Theory Summer Festival State University of New York at Stony Brook
- 2000 (1) The Eleventh Game Theory Summer Festival State University of New York at Stony Brook (2) The Fourth Spanish Meeting on Game Theory and The Eighth Summer Meeting on Game Theory-Valencia, Spain
- 2001 The Twelfth Game Theory Summer Festival State University of New York at Stony Brook
- 2002 The Thirteenth Game Theory Summer Festival State University of New York at Stony Brook
- 2003 The Fourteenth Game Theory Summer Festival State University of New York at Stony Brook
- 2004 The Fifteenth Game Theory Summer Festival State University of New York at Stony Brook
- 2005 The Sixteenth Game Theory Summer Festival State University of New York at Stony Brook
- 2006 (1) The Seventeenth Game Theory Summer Festival (2) Workshop on Innovations and Patent Licensing State University of New York at Stony Brook

- 2007 The Eighteenth Game Theory Summer Festival Stony Brook University
- 2007 A Game Science Conference in Honor of Ehud Kalai, December 16-18, Center for the Study of Rationality, The Hebrew University
- 2008 The Nineteen Game Theory Summer Festival Stony Brook University
- 2008 Scientific organizer of the Workshop on Implementation of Cooperative Solution Concepts - The Nash Program, in Honor of John Nash on the Occasion of his 80th Birthday (joint with David Wettstein)
- 2009 The Twentieth Game Theory Summer Festival Stony Brook University
- 2010 The Twenty First Game Theory Summer Festival Stony Brook University
- 2011 The Twenty Second Game Theory Summer Festival Stony Brook University
- 2012 The Twenty Third Game Theory Summer Festival Stony Brook University
- 2013 The Twenty Fourth Game Theory Summer Festival Stony Brook University
- 2014- The Twenty Five Game Theory Summer Festival- Stony Brook University
- 2014 Scientific organizer of the Workshop on Innovations, Patents and Licensing (joint with Rabah Amir and Sen Debapriya)
- 2014 Scientific organizer of the workshop on Strategic aspects on terrosim, security and espionage (joint with Timothy Mathews)

Employment:

1989-PRESENT: Leading Professor, Department of Economics, State University of New York at Stony Brook; Director, The Center for Game Theory in Economics, State University of New York at Stony Brook

January 1,2009- PRESENT: Academic Director of the Zell program, The Interdisciplinary Center (IDC), Herzliya

January 1,2010 – 2011, Dean, Arison School of Business, The Interdisciplinary Center (IDC), Herzliya

January 2001 – March 2001, Visiting Professor, Kellogg School of Business, Northwestern University January 1999 – May 1999: Visiting Professor, London School of Economics

1989-2008: Professor, Faculty of Management, Tel Aviv University;

September 1987-1989: Professor, Department of Economics, The Ohio State University and Professor, Faculty of Management, Tel Aviv University

September 1985-December 1985: Visiting Professor, Department of Economics, The Ohio State University

September 1984 – September 1985: Fellow of the Institute of Advanced Studies, The Hebrew University of Jerusalem

June 1984-1988: Professor of the Graduate School of Management, Northwestern University, Evanston, Illinois

January 1984 – Senior Lecturer, Faculty of Management, Tel Aviv University

September 1983 – December 1983 Visiting Professor, Department of Economics, Stanford University

January 1983 – September 1983 Associate Professor of the Graduate School of Management, Northwestern University, Evanston, Illinois

July 1982 – January 1983 Visiting Professor, Department of Economics, Stanford University

1981-1982 - Associate Professor of the Graduate School of Management, Northwestern University, Evanston, Illinois

September 1980 Visiting Assistant Professor for the Graduate School of Management, Northwestern University, Evanston, Illinois

January 1980 Long term scientific visitor of the Institute of Advanced Studies, Mount Scopus, Hebrew University and a member of the mathematical team of Everyman's University, Ramat Aviv, Tel Aviv.

October 1978 – January 1980 Research Associate at C.O.R.E., Université Catholique de Louvain, Belgium

1978 (one month) Institute for Mathematical Studies in the Social Sciences, Stanford University

1977 – 1978 Instructor in the Department of Statistics, Tel Aviv University, Israel

1977 (one month) Department of Mathematical Economics, University of Bonn, West Germany

1976 – 1977 A member of the mathematical team of the Everyman's University, Tel Aviv, srael

1974 – 1976 Assistant, The Department of Mathematics, The Hebrew University of Jerusalem, Israel

1967 – 1969, 1973 – 1974 Service in the Israeli Army

Administrative Responsibilities

1992 – 1993, Chair of the Department of Operation Research in the Faculty of Management, Tel Aviv University

1995 – 1996, Director of the Faktor Entrepreneurial Center, Faculty of Management, Tel Aviv University

1995 – 1996, Director of the Institute of Decision Sciences, State University of New York at Stony Brook

1997 – present, Director of the Stony Brook Center for Game Theory, Stony Brook University

- 2007 2013 Elected member of the council of the game theory society
- 2009 present, Academic Director of the Zell program, The Interdisciplinary Center (IDC), Herzliya
- 2010 2011, Dean, Arison School of Business, The Interdisciplinary Center (IDC), Herzliya

Other Professional Services

- 1. ADVFN (since April 2010). A public company, a provider of financial information, based in London, UK.
- 2. Bidorbuy.com (since 1999).An online auction (private) company, based in South-Africa.
- 3. Digi-Block (since 2000). An educational (private) company, based in Boston, USA
- 4. Radware (since October, 2010). A public load balancing network company, based in Israel.
- 5. Exposee (Since April, 2009, currently the chairman of the board) .A (private) company, offers an industry tracker, a personal news platform for industry professionals, based in Israel.
- 6. Bank-Hapoalim (since December 2011)- The largest bank in Israel, a public company, based in Israel.
- 7. Bizzabo (since August 2012)- A social networking (private) company, provides business communications in conferences and meet-ups, based in Israel
- 8. Kerem Behar Hanegev (since 2000)- A private company, runs a vineyard and olive plantation, based in Israel

Main Advisor of Ph.D. Students:

- 1. Yair Zimon, graduated in 1990. Thesis: Middlemen and Efficient Trades.
- 2. Dachrahn Wu, graduated in 1992. Thesis: Monopolistic Broker and the Threat of a Secondary Market: A Strategic Approach.
- 3. Yan Chen, graduated in 1994. Thesis: Acceptable and Walrasian Allocations.
- 4. In Sung Cho, graduated in 1994. Thesis: The Most Favored Customer Policy: A Game Theoretic Approach.
- 5. Arie Gavius, graduated in 1995. Thesis: Transfer Prices in Complex Organizations.
- 6. Junichi Watanabe, graduated in 1995. Thesis: Multiproduct Price Competition.
- 7. Barry Feldman, graduated in 1995. Thesis: Bargaining Power, Values and Coalition Formation with Externalities (joint advisor: Pradeep Dubey).
- 8. Ram Orzach, graduated in 1995. Thesis: Signalling Reversal.
- 9. Toker Doganoglu, graduated in 1997. Thesis: Network Competition and Access Charge Rules.

- 10. Chun-Hsiung Liao, graduated in 1998. Thesis: Bundling in Oligopoly Competition.
- 11. Chien-Liang Chen, graduated in 1999. Thesis: Collusion in Auctions.
- 12. Ismo Linnosmaa, graduated in 2000. Thesis: Essays on Product Market Competition and Managerial Incentives in Oligopoly Firms.
- 13. Timothy Mathews, graduated in 2002. Thesis: Buyout Options in Internet Auction Markets.
- 14. Abdel-Hameed Nawar, graduated in 2003. Thesis: Essays on Internet Auctions.
- 15. Debapriya Sen, graduated in 2003. Thesis: Essays on Applied Microeconomic Theory.
- 16. Giorgos Stamatopoulos, graduated in 2003. Thesis: Essays on Licensing Games.
- 17. Naoki Watanabe, graduated in 2003. Thesis: Asymptotic Properties of the Shapley Value of Patent Licensing.
- 18. Yael Itzhaki, graduated in 2004. Thesis: Effects of Gender Composition on Negotiating Parties: A Bi-Cultural Study.
- 19. Abhijit Sengupta, graduated in 2005. Thesis: Essays on Market Design.
- 20. Andriy Zapechelnyuk, graduated in 2005. Thesis: Bargaining with a Bureaucrat.
- 21. Ming-Hung Weng, graduated in 2006. Thesis: Essays on Patent Licensing
- 22. Alejandro Barrachina, graduated in 2012. Thesis: Industrial Espionage
- 23. Zhen Xu, graduated in 2013. Thesis: Optimal Fees for Sale Online
- 24. Hila Tahar Itzhak, graduted in 2013. Thesis: Modeling and Designing Advertising Agencies' Compensation Systems: A Game Theoretic Approach
- 25. Artyom Jelnov, graduated in 2014. Thesis: Voting Power and Proportional Representation of Voters
- 26. Biligbaatar Tumendemrerel, graduated in 2014. Thesis: Third Price Auction

List of Publications:

A. BOOKS

- 1. E. Artzy, D. Leibovitz, Y. Tauman: Window to Mathematics (1978), Everyman's University (12 units in Hebrew).
- 2. R. Aumann, Y. Tauman, S. Zamir: Game Theory (1981) Everyman's University (6 units in Hebrew).
- 3. T. Ichiishi, A. Neyman, Y. Tauman (Eds.): Game Theory and Applications (1991). Academic Press, Inc. A collection of articles presented at the International Conference on

Game Theory and Applications held at The Ohio State University, June 18-24, 1987.

B. ARTICLES

- 1. A. Neyman, Y. Tauman "The Existence of a Non-Diagonal Axiomatic Values" Mathematics of Operations Research 1, 1976, 246-250.
- 2. Y. Tauman "A Non-Diagonal Value on a Reproducing Space" Mathematics of Operations Research 2, 1977, 331-337.
- 3. A. Nyeman, Y. Tauman "The Partition Value" Mathematics of Operations Research 4, 1979, 236-264.
- 4. Y. Tauman "Value on the Space of All Scalar Integrable Games" Game Theory and Related Topics North Holland Publishing Company, 107-115, 1979.
- 5. Y. Tauman "Values on a Class of Non-Differentiable Market Games" International Journal of Game Theory 10, 1981, 155-162.
- 6. L. Mirman, Y. Tauman "Valuer de Shapley et Repartition Equitable des Couts de Production" Cahiers du Seminaire d'Econometrie 23, 1981.
- 7. Y. Tauman "Values of Market Games with a Majority Rule" Game Theory and Mathematical Economics, North Holland Publishing Company, 103-122, 1981.
- 8. Y. Tauman "A Characterization of Vector Measure Games in *pNA*" Israel Journal of Mathematics 43, 1982, 75-96.
- 9. L. Mirman, Y. Tauman "Demand Compatible Equitable Cost-Sharing Prices" Mathematics of Operations Research 7, 1982, 40-56.
- 10. L. Mirman, Y. Tauman "The Continuity of the Aumann-Shapley Price Mechanism" Journal of Mathematical Economics 9, 1982, 235-249.
- 11. D. Samet, Y. Tauman "The Determination of the Marginal Cost Prices under a Set of Exioms" Econometrica 50, 1982, 8985-909.
- 12. L. Mirman, J. Raanan, Y. Tauman "A Sufficient Condition of *f* for μ of to be in *pNAD*" Journal of Mathematical Economics, 9, 1982, 251-257.
- 13. L. Mirman, D. Samet, Y. Tauman "An Axiomatic Approach to the Allocation of a Fixed Cost through Prices" Bell Journal of Economics 14, 1983, 139-151.
- 14. D. Samet, Y. Tauman, I. Zang "An Application of the Aumann-Shapley Prices to Transportation Problem" Mathematics of Operations Research 9, 1984, 25-42.
- 15. M. Kamien, Y. Tauman "The Private Value of a Patent: A Game Theoretic Analysis" Zeitschrift für Nationalokonomie Supplement 4, 1984, 93-118.

- 16. J. Reichert, Y. Tauman "The Space of Polynomials in Measures is Internal" Mathematics of Operations Research 10, 1985, 1-6.
- 17. L. Mirman, Y. Tauman, I. Zang "Supportability, Sustainability and Subsidy Free Prices" Rand Journal of Economics 16, 1985, 114-126.
- 18. L. Mirman, Y. Tauman, I. Zang: Monopoly and Sustainable Prices as a Nash Equilibrium in Contestable Markets" Issues in Contemporary Microeconomics, London: MacMillan Company, 328-339, 1985.
- 19. L. Mirman, Y. Tauman, I. Zang "On the Use of Game Theoretic Concepts in Cost Accounting" Cost Allocation Methods, Principles and Applications, H.P. Young (Ed.), North Holland Publishing Company, 57-77, 1985.
- 20. A. Kats, Y. Tauman "Coalition Production Economies with Divisible and Indivisible Inputs: Asymptotic Results" Journal of Mathematical Economics 14, 1986, 19-42.
- 21. Y. Orgler, Y. Tauman "A Game Theoretic Approach to Trade Credit Collections and Disbursements" Management Science 32, 1986, 121-131.
- 22. L. Mirman, Y. Tauman, I. Zang "Ramsey Prices, Average Cost Prices and Price Sustainability" International Journal of Industrial Organization 4, 1986, 123-140.
- 23. M. Kamien, Y. Tauman "Fees versus Royalties and the Private Value of a Patent" Quarterly Journal of Economics 101, 1986, 471-491.
- 24. Y. Tauman, Y. Weiss "Labor Union and the Adoption of New Technologies" Journal of Labor Economics 5, 1987, 477-501.
- 25. M. Kamien, Y. Tauman, I. Zang "Optimal License Fees for a New Product" Mathematical Social Sciences 16, 1988, 77-106.
- 26. Y. Tauman "The Aumann-Shapley Prices: A Survey", The Shapley Value: Essays in Honor of Lloyd Shapley, A. Roth (Ed.), Cambridge University Press, 279-304, 1989.
- 27. M. Kamien, Y. Tauman, S. Zamir "The Value of Information in a Strategic Conflict" Games and Economic Behavior 2, 1990, 129-153.
- 28. M. Kamien, Y. Tauman, S. Zamir "Information Transmission", Game Theory and Applications, T. Ichiishi, A. Neyman and Y. Tauman (Eds.), Academic Press Inc., 273-281, 1990.
- 29. L. Mirman, Y. Tauman, I. Zang "Cooperative Behavior in a Competitive Market" Mathematical Social Sciences 22, 1991, 105-121.
- 30. M. Kamien, S. Oren, Y. Tauman "Optimal Licensing of Cost Reducing Innovation" Journal of Mathematical Economics 21, 1992, 483-508.
- 31. I. Buch, Y. Tauman "Bargaining with a Ruler" International Journal of Game Theory 21, 1992, 131-148.

- 32. D. Schmeidler, Y. Tauman "Incentive-Compatible Cost-Allocation Schemes" Journal of Economic Theory 63, 1994, 189-207.
- 33. R. Orzach, Y. Tauman "Signaling Reversal" International Economic Review 37, 1996, 453-464.
- 34. Y. Tauman, A. Urbano, J. Watanabe "A Model of Multiple Product Price Competition" Journal of Economic Theory 77, 1997, 377-401.
- 35. Y. Tauman, Y. Chen "Acceptable and Walrasian Allocations" Journal of Mathematical Economics 34, 2000, 415-438.
- 36. R. Aoki, Y. Tauman "Patent Licensing with Spillovers" Economics Letters 73, 2001, 125-130.
- 37. C.H. Liao, Y. Tauman "The Role of Bundling in Price Competition" International Journal of Industrial Organization 20, 2002, 365-389.
- 38. T. Doganoglu, Y. Tauman "Network Competition and Access Charge Rules" The Manchester School 70, 2002, 16-35.
- 39. M. Kamien, Y. Tauman "Patent Licensing: The Inside Story" The Manchester School 70, 2002, 7-15.
- 40. Y. Tauman "A Note on *k*-Price Auctions with Complete Information" Games and Economic Behavior 41, 2002, 161-164.
- 41. R. Orzach, P. Overgard and Y. Tauman "Modest Advertising Signals Strength" Rand Journal of Economics 33, 2002, 340-358.
- 42. S. Hart, Y. Tauman "Market Crashes without External Shocks" Journal of Business 77, 2004, 1-8.
- 43. C.H. Liao, Y. Tauman "There is a Free Lunch After All" Mathematical Social Sciences 48, 2004, 223-233.
- 44. C.H. Liao, Y. Tauman "Implementation of the Socially Optimal Outcome" The Manchester School 72, 2004, 618-625.
- 45. R. Orzach, Y. Tauman "Strategic Dropouts" Games and Economic Behavior 50, 2005, 79-88.
- 46. C.L. Chen, Y. Tauman "Collusion in One-shot Second-price Auctions" Economic Theory 28, 2006, 145-172.
- 47. N. Watanabe, Y. Tauman "The Shapley Value of a Patent Licensing Game: The Asymptotic Equivalence to Non-cooperative Results" Economic Theory, 30, 135-149, 2007.
- 48. D. Sen, Y. Tauman "General Licensing Schemes for a Cost-Reducing Innovation" Games and Economic Behavior, 59,2007, 163-186.
- 49. O. Haimanko, Y. Tauman "Recent Developments in the Theory of Aumann-Shapley Pricing,

- Part I: The Nondifferentiable Case", Game Theory and Resource Allocation: The Axiomatic Approach, NATO ASI Series, W. Thomson (Ed.), forthcoming.
- 50. G. Stamatopoulos, Y. Tauman "Licensing of a quality improvement innovation", Mathematical Social Sciences, 56(3),2008, pp.410-438.
- 51. A. Jelnov, Y. Tauman "The Private Value of a Patent: A Cooperative Approach", Mathematical Social Sciences, *Volume 58, Issue 1, 2009, Pages 84-97.*
- 52. G. Kivetz, Y. Tauman "Simple Collusive Agreements in One-shot First Price Auctions" Games and Economic Behavior, 69, 2010, pp.138-149.
- 53. Y. Tauman, A. Zapechelnyuk "Bargaining with a Property Rights Owner" Games and Economic Behavior, 70, 2010, pp. 132-145.
- 54. Y. Tauman, A. Zapechelnyuk "On (Non-) Monotonicity of Cooperative Solutions", International Journal of Game Theory, Volume 39, 2010, pp 171-175.
- 55. E. Carceles, Y. Tauman "A Strategic Analysis of the War against Terror" Games and Economic Behavior, 71, 2011, pp 49-65.
- 56. A. Sengupta, Y. Tauman "Inducing Efficiency in Oligopolistic Markets with Increasing Returns to Scale", Mathematical Social Sciences, 62(2), 2011 ,pp.95-100. Available at SSRN: http://ssrn.com/abstract=1342345
- 57. Y. Tauman, M-H. Weng, "Selling Patent Rights and the Incentive to Innovate", Economics Letters, 114, 2012 ,pp 241-244
- 58. S.Bhattacharya, C. d'Aspremont, S. Guriev, D. Sen, Y. Tauman, "Bhattacharya, S. (2014). Cooperation in R&D: Patenting, licensing, and contracting. In K. Chatterjee & W. Samuelson (Eds.), *Game theory and business applications*. New York: Springer."
- 59. .A. Jelnov, Y.Tauman, "Voting power and proportional representation of voters", International Journal of Game Theory: Volume 43, Issue 4 (2014), Page 747-766
- 60. A. Barrachina , Y.Tauman, A. Urbano. "Entry and Espionage with Noisy Signals", Games and Economic Behavior, <u>Volume 83</u>, January 2014, Pages 127–146
- 61. B. Badia, Y. Tauman and B. Tumendemberel, (2014) "A note on Cournot equilibrium with positive price", *Economics Bulletin*, Vol. 34 No. 2 pp. 1229-1234

Working Papers

- 1. D. Biran, Y. Tauman "The Decision to Attack a Nuclear Facility: The Roll of Intelligence" (2009).
- 2. A. Anagnostopoulos, E. Carceles, Y. Tauman," Welfare Weights for Social

Optimization Problems".(2013)

- 3. A. Barrachina , Y.Tauman, A. Urbano, "Entry with Two Correlated Signals" (2014)
- 4. D.Sen, Y. Tauman, "Patent Licensing in a Cournot Oligopoly: Some General Results" (2014)
- 5. A. Jelnov, Y. Tauman, "Attacking a Nuclear Facility of a Provocateur" (2014)