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## **Drew Fudenberg**

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### **PERSONAL**

Born March 2, 1957

Married, three children

U.S. citizen

### **EDUCATION**

A.B., Harvard College, 1978, *Magna cum laude* in Applied  
Mathematics Phi Beta Kappa (Junior Twelve)

Ph.D., Massachusetts Institute of Technology, 1981,  
Economics NSF Graduate Fellowship

### **ACADEMIC APPOINTMENTS**

Assistant Professor, University of California, Berkeley, 1981 – 1985

Visiting Assistant Professor, Massachusetts Institute of Technology, Fall 1984

Visiting Associate Professor, Stanford Graduate School of Business, Winter 1985

Associate Professor, University of California, Berkeley, 1985 – 1987

Visiting Professor, University of Toulouse, Spring 1992

Professor, Massachusetts Institute of Technology, 1987 – 1993

Professor, Harvard University, 1993 – 2016

Visiting Professor, Massachusetts Institute of Technology, 2003 – 2004

Kumho Visiting Professor, Yale University, 2011 – 2012.

SK Professor, Yonsei University, Fall 2015.

Paul A. Samuelson Professor of Economics, MIT, 2016 – present.

### **PROFESSIONAL ACTIVITIES**

Principal Investigator, National Science Foundation Grants, 1982 – present

Associate Editorships: *The Journal of Economic Theory*, 1984 – 1996; *The Quarterly Journal of Economics*, 1984 – 1989 and 2008 – 2017; *Econometrica*, 1985 – 1996; *Games and Economic Behavior*, 1988 – 1993, *Theoretical Economics*, 2004 – present; *PLOS*, 2018 – present. Foreign Editor: *Review of Economic Studies*, 1993 – 1996

Program Committee for the Winter 1985 and Summer 1987 North American Meetings, and the 1990 World Congress of the Econometric Society

National Science Foundation Economics Panel, 1993 – 1995

Editor of *Econometrica*, 1996 – 2000

Econometric Society: Council Member, 1998 – 2004 and 2013 – 2015; Chair of Walras-Bowley Selection Committee for the 1997 and 2006 lectures, Member of Nominating Committee, 2013; President, 2017 (Second Vice President, 2015, First Vice President, 2016)

Council of International Game Theory Society, 2004 – present

Executive Board of *Theoretical Economics*, 2004 – 2011 (and co-founder of the journal)

Scientific Council of the Toulouse School of Economics, 2010 – 2020

Nominating Committee of the Society for the Advancement of Economic Theory, 2012 – 2014

Senior Program Committee, ACM-EC, 2013 and 2014; Program Committee, 2015

AEA Nominating Committee, 2017; AEJ: Microeconomics Editor Search Committee, 2019

Area Chair, EC, 2021

ACM Economics of Computation Program Committee, 2023, Area Chair, 2021

## **FELLOWSHIPS AND AWARDS**

Sloan Foundation Research Fellowship, 1984

Fellow of the Econometric Society, 1987

Guggenheim Fellow, 1990

Fellow, American Academy of Arts and Sciences, 1998

Member, National Academy of Sciences, 2014

Everett Mendelsohn Excellence in Mentoring Award, Harvard Graduate Student Council, 2016

Distinguished Fellow, American Economic Association, 2023

## **INVITED LECTURES**

Armen Alchian Lecture, UCLA, January 1988

Plenary Speaker, 6<sup>th</sup> World Congress of the Econometric Society, Barcelona, August 1990

Plenary Speaker, International Conference on Game Theory, Stonybrook, NY, 1996, 2002, 2005, 2017

Plenary Speaker, North American Summer Meeting of the Econometric Society, Iowa City, June 1996

Clarence Tau Lecturer, “The Theory of Learning in Games” (3 lectures), University of Iowa, November 1997

Plenary Speaker, Economic Science Association, Cambridge, MA, June 2002

T.S. Kim Memorial Seminar, Seoul National University, April 2003

J. Fish Smith and Lillian F. Smith Lecture, BYU, April 2005

Cowles Foundation Lecture, Yale University, April 2006

Keynote Lecture, ACM conference on electronic commerce, June 2006

Nancy Schwartz Lecture, Northwestern University, April 2009

Alfred Marshall Lecture, University of Cambridge, September 2009

Fisher-Schultz Lecture, World Congress of the Econometric Society, August 2010

Douglass North Lecture, Washington University of St. Louis, MO, October

2013 Arrow Lecture, Hebrew University of Jerusalem, July 2015  
Keynote Speaker, UECE Game Theory Meetings, Lisbon, October 2016  
Presidential Address of the Econometric Society; Sydney, June 2017; Algiers, July 2017; Lisbon, August 2017; Buenos Aires, November 2017; Philadelphia, January 2018  
Keynote Speaker, Conference of the Catalan Economic Society, Barcelona, May 2019  
Keynote Speaker, Learning, Evolution and Games 2019, Bar Ilan University, June 2019

**PUBLICATIONS** (by date)

1. "Preemption, Leapfrogging, and Competition in Patent Races," (with R. Gilbert, J. Stiglitz and J. Tirole), *European Economic Review*, 22 (1983), 3-31.
2. "Subgame-Perfect Equilibria of Finite and Infinite Horizon Games" (with D.K. Levine), *Journal of Economic Theory*, 31 (1983), 251-268.
3. "Capital as a Commitment: Strategic Investment to Deter Mobility" (with J. Tirole), *Journal of Economic Theory*, 31, (1983), 227-250.
4. "Learning by Doing and Market Performance" (with J. Tirole), *Bell Journal of Economics*, 14 (1983), 522-530.
5. "Sequential Bargaining with Incomplete Information" (with J. Tirole), *Review of Economic Studies*, 50 (1983), 221-247.
6. "Strike Activity, Wage Settlements and Rationality," (with D.K. Levine and P. Ruud) pp. 47-72 in *Current Thinking and Research in Labor Economics*, ed. Walter Fogel (1984), UCLA Institute of Industrial Relations: Los Angeles.
7. "The Fat-Cat Effect, the Puppy-Dog Ploy, and the Lean and Hungry Look" (with J. Tirole), *American Economic Review*, 74 (1984), 361-366. Reprinted in O. Williamson ed. *Industrial Economics*, Edward Elgar, 1990; in *Microeconomic Theories of Imperfect Competition: Old Problems and New Perspectives*, J. Gabszewicz and J. Thisse, eds., Edward Elgar, 1999, in *Readings in Games and Information*, E. Rasmusen, ed., Basil Blackwell (2001), in *Readings in Industrial Economics*, L. Cabral ed., Basil Blackwell (2000), and in *The Economics of Business Strategy*, J. Kay ed., Edward Elgar, 2003.
8. "Preemption and Rent Equalization in the Adoption of New Technology," (with J. Tirole), *Review of Economic Studies*, 52 (1985), 383-402; reprinted in *Game Choices*, Geven Grenadier, Editor, Risk Books, 2000., and *Readings in Industrial Economics*, L. Cabral, ed., Blackwell Publishers, 2000.
9. "Infinite-Horizon Models of Bargaining with One-Sided Incomplete Information" (with D.K. Levine and J. Tirole), pp. 73-98 in A. Roth, ed., *Game Theoretic Models of Bargaining*, Cambridge University Press, 1985
10. "Limit Games and Limit Equilibria" (with D.K. Levine), *Journal of Economic Theory*, 38 (1986), 261-279.

11. "Folk Theorem for Repeated Games with Discounting or with Incomplete Information" (with E. Maskin), *Econometrica*, 54 (1986), 533-554.
12. "A Theory of Exit in Duopoly" (with J. Tirole), *Econometrica*, 54 (1986), 943-960.
13. "A Signal-Jamming Model of Predation" (with J. Tirole), *Rand Journal of Economics*, 17 (1986), 366-376.
14. "Incomplete-Information Bargaining with Outside Opportunities" (with D.K. Levine and J. Tirole), *Quarterly Journal of Economics*, 52 (1987), 37-50.
15. "Understanding Rent Dissipation: On the Uses of Game Theory in Industrial Organization" (with J. Tirole), *American Economic Review*, Papers and Proceedings, 77 (1987), 176-183.
16. "Reputation and Simultaneous Opponents" (with D. Kreps), *Review of Economic Studies*, 54 (1987), 541-568.
17. "On the Robustness of Equilibrium Refinements" (with D. Kreps and D.K. Levine), *Journal of Economic Theory*, 44 (1988), 354-380.
18. "Open-Loop and Closed-Loop Equilibria of Dynamic Games with Many Players" (with D.K. Levine), *Journal of Economic Theory*, 44 (1988), 1-18.
19. "Rational Expectations Business Cycles in Search Equilibrium" (with P. Diamond), *Journal of Political Economy*, 97 (1989), 606-619.
20. "Reputation and Equilibrium Selection in Games with a Single Long-Run Player" (with D.K. Levine), *Econometrica*, 57 (1989), 759-778.
21. "Game Theory for Industrial Organization: Introduction and Overview" (with J. Tirole), Ch. 5 in D. Schmalensee and R. Willig, eds., *Handbook of Industrial Organization*, North-Holland, Amsterdam/New York, 1989.
22. "Evolution and Cooperation in Noisy Repeated Games" (with E. Maskin), *American Economic Review*, 80 (1990), 274-279.
23. "Short-Term Contracts and Long-Term Agency Relationships" (with B. Holmstrom and P. Milgrom), *Journal of Economic Theory*, 51 (1990), 1-32.

24. "Nash and Perfect Equilibria of Discounted Repeated Games" (with E. Maskin), *Journal of Economic Theory*, 51 (1990), 194-206.
25. "Repeated Games with Long-run and Short-run Players" (with D. Kreps and E. Maskin), *Review of Economic Studies*, 57 (1990), 555-573.
26. "Moral Hazard and Renegotiation in Agency Contracts" (with J. Tirole), *Econometrica*, 58 (1990), 1279-1320.
27. "Rational Play with Payoff Uncertainty" (with E. Dekel), *Journal of Economic Theory*, 52 (1990), 243-267.
28. "On the Dispensability of Public Randomizations in Discounted Repeated Games" (with E. Maskin), *Journal of Economic Theory*, 53 (1991), 428-438.
29. "Perfect Bayesian and Sequential Equilibrium" (with J. Tirole), *Journal of Economic Theory*, 53 (1991), 236-260.
30. "An Approximate Folk Theorem for Games with Imperfect Private Information" (with D.K. Levine), *Journal of Economic Theory*, 54 (1991), 26-47.
31. "Maintaining a Reputation When Strategies Are Imperfectly Observed" (with D.K. Levine), *Review of Economic Studies*, 59 (1992), 561-581.
32. "Evolutionary Dynamics with Aggregate Shocks" (with C. Harris), *Journal of Economic Theory*, 57 (1992), 420-441.
33. "Commitment and Cooperation in Long-Term Relationships," in J. J. Laffont, ed., *Advances in Economic Theory: Sixth World Congress*, Cambridge University Press, 1993.
34. "Self-Confirming Equilibrium" (with D.K. Levine), *Econometrica*, 61 (1993), 523-546.
35. "Steady State Learning and Nash Equilibrium" (with D.K. Levine), *Econometrica*, 61 (1993), 547-574.
36. "Rules of Thumb for Social Learning" (with G. Ellison), *Journal of Political Economy*, 101 (1993), 612-643.
37. "Learning Mixed Equilibria" (with D. Kreps), *Games and Economic Behavior*, 5 (1993) 320-367.
38. "Efficiency and Observability in Games with Long-Run and Short-Run Players" (with D.K. Levine), *Journal of Economic Theory*, 62 (1994), 103-135.

39. "The Folk Theorem in Repeated Games with Imperfect Public Information" (with D.K. Levine and E. Maskin), *Econometrica*, 62 (1994), 997-1039. Reprinted in *Recent Developments in Game Theory*, E. Maskin, ed., Edward Elgar, 1994, and in *Cartels*, S. Salant and M. Levenstein, ed., Edward Elgar, 2004.
40. "Learning in Extensive Games, I: Self-Confirming Equilibria," (with D. Kreps), *Games and Economic Behavior*, 8 (1995), 20-55.
41. "A Theory of Income and Dividend Smoothing Based on Incumbency Rents" (with J. Tirole), *Journal of Political Economy*, 103 (1995), 75-93.
42. "Word of Mouth Communication and Social Learning" (with G. Ellison), *Quarterly Journal of Economics*, 110 (1995), 93-126.
43. "Consistency and Cautious Fictitious Play," (with D.K. Levine), *The Journal of Economic Dynamics and Control*, 19 (1995), 1065-1089.
44. "Maintaining a Reputation Against a Long-Lived Opponent," (with M. Celentani, D.K. Levine, and W. Pesendorfer), *Econometrica*, 64 (1996), 691-704.
45. "Measuring Players' Losses in Experimental Games" (with D.K. Levine), *Quarterly Journal of Economics*, 112 (1997), 479-506.
46. "When Are Non-Anonymous Players Negligible?" (with D.K. Levine and W. Pesendorfer), *Journal of Economic Theory*, 79 (1998), 46-71.
47. "Upgrades, Buybacks, and Trade-Ins," (with J. Tirole), *Rand Journal of Economics*, 29 (1998), 235-258.
48. "Learning in Games: Where Do We Stand?" (with D.K. Levine), *European Economic Review*, 42 (1998), 631-639.
49. "Conditional Universal Consistency" (with D.K. Levine), *Games and Economic Behavior*, 29 (1999), 104-130.
50. "An Easier Way to Calibrate" (with D.K. Levine), *Games and Economic Behavior*, 29 (1999), 131-137.
51. "Payoff Information and Self-Confirming Equilibrium" (with E. Dekel and D.K. Levine), *Journal of Economic Theory*, 89 (1999), 165-185.
52. "Learning Purified Equilibria" (with G. Ellison), *Journal of Economic Theory*, 90 (2000), 84-115.

53. "The Neo-Luddite's Lament: Excessive Upgrading of Computer Software (with G. Ellison), *Rand Journal of Economics*, 31 (2000), 253-272.
54. "Customer Poaching and Brand Switching" (with J. Tirole), *Rand Journal of Economics*, 31 (2000), 634-657.
55. "Pricing Under the Threat of Entry by the Sole Supplier of a Network Good" (with J. Tirole), *Journal of Industrial Economics*, 48 (2000), 373-390.
56. "Subjective Uncertainty Over Behavior Strategies: A Correction" (with E. Dekel and D.K. Levine), *Journal of Economic Theory*, 104 (2002), 473-478.
57. "Knife-Edge or Plateau: When Do Market Models Tip?" (with G. Ellison), *Quarterly Journal of Economics*, 118 (2003), 1249-1278.
58. "Word-of-Mouth Learning" (with A. Banerjee), *Games and Economic Behavior*, 46 (2004), 1-22.
59. "Learning to Play Bayesian Games," (with E. Dekel and D.K. Levine), *Games and Economic Behavior*, 46 (2004), 282-303.
60. "Competing Auctions," (with G. Ellison and M. Mobius), *Journal of the European Economic Association*, 2 (2004), 30-66.
61. "Emergence of Cooperation and Evolutionary Stability in Finite Populations," (with M. Nowak, A. Sasaki, and C. Taylor), *Nature*, 428 (2004), 646-650.
62. "Evolutionary Game Dynamics in Finite Populations," (with M. Nowak, A. Sasaki, and C. Taylor), *Bulletin of Mathematical Biology*, 66 (2005), 1621-1644.
63. "Evolutionary Cycles of Cooperation and Defection," (with L. Imhof and M. Nowak), *Proceedings of the National Academy of Sciences*, 102 (2005), 10797-10800.
64. "Learning and Belief-Based Trade," (with D. K. Levine), *The Latin American Journal of Economics*, 42 (2005), 199-207.
65. "Superstition and Rational Learning," (with D. K. Levine), *American Economic Review*, 96 (2006), 630-651.
66. "Topologies on Types," (with E. Dekel and S. Morris), *Theoretical Economics*, 1 (2006), 275-309.
67. "Advancing Beyond *Advances in Behavioral Economics*," *Journal of Economic Literature*, 44 (2006), 694-711, reprinted in *Sistemi Intelligenti*, 3, (2007).

68. "Evolutionary Game Dynamics in Finite Populations with Strong Selection and Weak Mutations," (with L. Imhof, M. Nowak and C. Taylor), *Theoretical Population Biology*, 70 (2006), 352-363.
69. "Imitation Processes with Small Mutations," (with L. Imhof), *Journal of Economic Theory*, 131 (2006), 251-262.
70. "A Dual-Self Model of Impulse Control," (with D.K. Levine), *American Economic Review*, 96 (2006), 1449-1476.
71. "The Nash-Threats Folk Theorem with Communication and Approximate Common Knowledge in Two-Player Games," *Journal of Economic Theory*, 132 (2007), 461-473.
72. "Behavior-Based Price Discrimination and Customer Recognition," (with M. VillasBoas), in T. Hendershott, ed., *Economics and Information Systems, Vol. 1*, Elsevier, Oxford, 2007.
73. "Interim Rationalizability," (with E. Dekel and S. Morris), *Theoretical Economics*, 2 (2007), 15-40.
74. "Existence of Equilibrium in Double Auctions," (with M. Möbius and A. Szeidl), *Journal of Economic Theory*, 133 (2007), 550-567.
75. "An Economist's Perspective on Multi-Agent Learning," (with D.K. Levine), *Artificial Intelligence*, 171 (2007), 378-381.
76. "Tit-for-Tat or Win-Stay, Lose-Shift?" (with L. Imhof and M. Nowak), *Journal of Theoretical Biology*, 247 (2007), 27-49.
77. "Perfect Public Equilibrium when Players are Patient" (with D.K. Levine and S. Takahashi), *Games and Economic Behavior*, 61 (2007), 27-49.
78. "Continuous Time Limits of Repeated Games with Imperfect Public Monitoring" (with D.K. Levine), *Review of Economic Dynamics*, 10 (2007), 173-192.
79. "Winners Don't Punish," (with A. Dreber, D. Rand, and M. Nowak), *Nature*, 452 (2008), 348-351.
80. "Monotone Imitation Dynamics in Large Populations" (with L. Imhof), *Journal of Economic Theory*, 140 (2008), 229-245.



81. "When is Reputation Bad?" (with J. Ely and D.K. Levine), *Games and Economic Behavior*, 63 (2008), 498-526.
82. "Repeated Games with Frequent Signals," (with D.K. Levine), *Quarterly Journal of Economics*, 124 (2009), 233-265.
83. "Random Matching in Adaptive Dynamics," (with G. Ellison and L. Imhof), *Games and Economic Behavior*, 66 (2009), 98-114.
84. "Learning and Equilibrium," (with D.K. Levine), *Annual Review of Economics*, 1 (2009), 385-419.
85. "Positive Interactions Promote Public Cooperation," (with A. Dreber, T. Ellingsen, M. Nowak, and D. Rand), *Science*, 325 (2009), 1272-1275.
86. "Self-Confirming Equilibrium and the Lucas Critique," (with D.K. Levine), *Journal of Economic Theory*, 144 (2009), 2354-2371.
87. "Location Choice in Two-Sided Markets with Indivisible Agents," (with R.M. Anderson and G. Ellison), *Games and Economic Behavior*, 69 (2010), 2-23.
88. "Unobserved Punishment Supports Cooperation," (with P.A. Pathak), *Journal of Public Economics*, 94 (2010), 78-86.
89. "Repeated Games Where the Payoffs and Monitoring Structure Are Unknown," (with Y. Yamamoto), *Econometrica*, 78 (2010), 1673-1710.
90. "Let the Right One In: A Microeconomic Approach to Partner Choice in Mutualisms," (with M. Archetti, F. U'beda, J. Green, N.E. Pierce, and D.W. Yu), *The American Naturalist*, 177 (2011), 75-85.
91. "Heterogeneous Beliefs and Local Information in Stochastic Fictitious Play," (with S. Takahashi), *Games and Economic Behavior* 71 (2011), 100-120.
92. "Repeated Games with Asynchronous Monitoring of an Imperfect Signal," (with W. Olszewski), *Games and Economic Behavior* 72 (2011), 86-99.
93. "The Folk Theorem for Irreducible Stochastic Games with Imperfect Public Monitoring," (with Y. Yamamoto), *Journal of Economic Theory*, 146 (2011), 1664-1683.
94. "Learning from Private Information in Noisy Repeated Games," (with Y. Yamamoto), *Journal of Economic Theory*, 146 (2011), 1733-1769.

95. "Risk, Delay, and Convex Self-Control Costs," (with D.K. Levine), *American Economic Journal: Microeconomics*, 3 (2011), 34-68.
96. "Timing and Self-Control," (with D.K. Levine), *Econometrica*, 80 (2012), 1-42.
97. "Fairness, Risk Preferences and Independence: Impossibility Theorems," (with D.K. Levine), *Journal of Economic Behavior and Organization*, 81 (2012), 606-612.
98. "Phenotype Switching and Mutations in Random Environments," (with L.A. Imhof), *Bulletin of Mathematical Biology*, 74 (2012), 399-421.
99. "Slow to Anger and Fast to Forgive: Cooperation in an Uncertain World," (with A. Dreber and D.G. Rand), *American Economic Review*, 102 (2012), 720-749.
100. "On the Robustness of Anchoring Effects in WTP and WTA Experiments," (with D.K. Levine and Z. Maniadis), *American Economic Journal: Microeconomics*, 2 (2012), Article131145.
101. "Price Discrimination in the Digital Economy," with (J. M. Villas-Boas), *The Oxford handbook of the digital economy*: (2012), 254-272.
102. "Subgame Perfect Implementation Under Information Perturbations," (with P. Aghion, R. Holden, T. Kunimoto and O. Tercieux), *Quarterly Journal of Economics*, 127 (2012), 1843-1881.
103. "An Approximate Dual-Self Model and Paradoxes of Choice under Risk," (with D.K. Levine and Z. Maniadis), *Journal of Economic Psychology*, 41 (2014), 55-67.
104. "Delayed-Response Strategies in Repeated Games with Observation Lags," (with Y. Ishii and S.D. Kominers), *Journal of Economic Theory*, 150 (2014), 487-514.
105. "Tail Probabilities for Triangular Arrays," (with D.K. Levine), *Journal of Dynamics and Games*, 1 (2014), 45-56.
106. "Who Cooperates in Repeated Games: The Role of Altruism, Inequity Aversion, and Demographics," (with A. Dreber and D.G. Rand), *Journal of Economic Behavior and Organization*, 98 (2014), 41-55.
107. "Learning with Recency Bias," (with D.K. Levine), *Proceedings of the National Academy of Sciences*, 111 (2014), 10826-10829.
108. "Recency, Records and Recaps: Learning and Non-Equilibrium Behavior in a Simple Decision Problem," (with A. Peysakhovich), 2014, *Proceedings of the 15<sup>th</sup> ACM Conference on Economics and Computation*, Stanford, CA.

109. "Dynamic Logit with Choice Aversion," (with T. Strzalecki), *Econometrica*, 83 (2015), 651-691.
110. "Rationalizable Partition-Confirmed Equilibrium," (with Y. Kamada), *Theoretical Economics*, 10 (2015), 775-806.
111. "Tirole's Industrial Regulation and Organization Legacy in Economics," *Scandinavian Journal of Economics*, 117 (2015), 771-800.
112. "It's the Thought That Counts: The Role of Intentions in Noisy Repeated Games," (with A. Dreber and D.G. Rand), *Journal of Economic Behavior and Organization*, 116 (2015), 481-499.
113. "Stochastic Choice and Revealed Perturbed Utility," (with R. Iijima and T. Strzalecki), *Econometrica*, 83 (2015), 2371-2409.
114. "Fast Convergence in Evolutionary Models: A Lyapunov Approach," (with G. Ellison and L.A. Imhof), *Journal of Economic Theory*, 161 (2016), 1-36.
115. "Whither Game Theory? Towards a Theory of Learning in Games," (with D. Levine), *Journal of Economic Perspectives*, 30 (2016), 151-170.
116. "Bayesian Posteriors for Arbitrarily Rare Events," (with K. He and L. Imhof), *Proceedings of the National Academy of Sciences*, 114 (2017), 2016, Article 18780.
117. "I'm Just a Soul Whose Intentions Are Good: The Role of Communication in Noisy Repeated Games," (with A.A. Arechar, A. Dreber, and D.G. Rand), *Games and Economic Behavior*, 104 (2017), 726-743.
118. "Active Learning With a Misspecified Prior," (with G. Romanyuk and P. Strack), *Theoretical Economics*, 12 (2017), 1155-1189.
119. "Rationalizable Partition-Confirmed Equilibrium with Heterogeneous Beliefs," (with Y. Kamada), *Games and Economic Behavior*, 109 (2018), 364-381.
120. "Learning and Type-Compatibility in Signaling Games," (with K. He), *Econometrica*, 86 (2018), 1215-1255.
121. "Speed, Accuracy, and the Optimal Timing of Choices," (with P. Strack and T. Strzalecki), *American Economic Review*, 108 (2018), 3651-3684.
122. "Learning dynamics with social comparisons and limited memory," (with J. Block and D.K. Levine), *Theoretical Economics*, 14 (2019), 135-172.

123. "Learning Theory and Heterogeneous Play in a Signaling-Game Experiment," (with E. Vespa), *American Economic Journal: Microeconomics*, 11 (2019), 186-215.
124. "Predicting and Understanding Initial Play," (with A. Liang), *American Economic Review*, 109 (2019), 4112-4141.
125. "Training and Effort Dynamics in Apprenticeships," (with L. Rayo), *American Economic Review* 109 (2019), 3780-3812.
126. "Payoff Information and Learning in Signaling Games," (with K. He) *Games and Economic Behavior*, 120 (2020), 96-120.
127. "Indirect Reciprocity and Learning in Signaling Games," (with D. Clark and A. Wolitzky), *Proceedings of the National Academy of Sciences*, 117 (2020), 11344-11349.
128. "Machine Learning for Evaluating and Improving Theories," (with A. Liang), *SIGecom Exchanges*, 18 (2020).
129. "Testing the Drift-Diffusion Model," (with P. Strack, T. Strzalecki, and W. Newey), *Proceedings of the National Academy of Sciences*, 117 (2020), 33141-33148.
130. "Limit Points of Endogenous Misspecified Learning," (with G. Lanzani and P. Strack), *Econometrica*, 89 (2021), 1065-1098.
131. "Player-Compatible Learning and Player-Compatible Equilibrium," (with K. He), *Journal of Economic Theory*, 194 (2021), Article 105238.
132. "Justified Communication Equilibrium" (with D. Clark), *American Economic Review*, 111 (2021), 3004-3034.
133. "Record-Keeping and Cooperation in Large Societies," (with D. Clark and A. Wolitzky), *Review of Economic Studies*, 88 (2021), 2179-2209.
134. "Working to Learn," (with G. Geogiadis and L. Rayo), *Journal of Economic Theory*, 179 (2021), Article 105347.
135. "Intervention with Limited Information," (with D.K. Levine), *International Journal of Game Theory*, (2021).
136. "Measuring the Completeness of Economic Models," (with J. Kleinberg, A. Liang, and S. Mullainathan), *Journal of Political Economy*, 130 (2022), 956-990.
137. "Simplicity and Probability Weighting in Choice under Risk," (with I. Puri), *AEA Papers and Proceedings*, 2022 (112), 421-425.

138. "A Reputation for Honesty," (with Y. Gao and H. Pei), *Journal of Economic Theory*, 204 (2022), Article 105508.
139. "Learning in Games and the Interpretation of Natural Experiments," (with D.K. Levine), *American Economic Journal: Microeconomics*, 14 (2022), 353-377.
140. "Observability, Dominance, and Induction in Learning Models" (with D. Clark and K. He), *Journal of Economic Theory*, 206 (2022), Article 105569.
141. "Which Misperceptions Persist?" (with G. Lanzani), *Theoretical Economics*, *Theoretical Economics*, 2023 (18): 1271–1315.
142. "Pathwise Concentration Bounds for Bayesian Beliefs," (with G. Lanzani and P. Strack), *Theoretical Economics*, 2023 (18): 1407–1439.
143. "Predicting Cooperation with Learning Models," (with G. Karreskog), *American Economic Journal: Microeconomics*, 2024 (16): 1-32.
144. "On concave functions over lotteries," (with R. Corrao and DK Levine), *Journal of Mathematical Economics*, 2024 (2): Article 102936.
145. "How Flexible is that Functional Form? Quantifying the Restrictiveness of Theories" (with Gao W, and Liang A.), *Review of Economics and Statistics*, forthcoming
146. "Noise-Tolerant Community Enforcement and the Strength of Small Stakes," with (Wolitzky A.), *American Economic Review: Insights*, forthcoming
147. "Selective Memory Equilibrium," (with Lanzani G, and Strack P.), *Journal of Political Economy*, forthcoming

## **WORKING PAPERS**

1. "A Theory of Learning, Experimentation, and Equilibrium in Games," (with D.M. Kreps), 1988.
2. "Evolution and Noisy Repeated Games," (with E. Maskin), 1994.
3. "Learning in Extensive Form Games, II: Experimentation and Nash Equilibrium," (with D. Kreps), 1994.
4. "Balanced-Budget Mechanisms for Adverse Selection Problems," (with D.K.

- Levine and E. Maskin), 1995.
5. "Stochastic Stability in Birth-Death Processes on Large Populations," (with D. Hojman), 2008.
  6. "Predictive Game Theory," 2010.
  7. "Self-Control, Social Preferences and the Effect of Delayed Payments," (with A. Dreber, D.K. Levine, and D.G. Rand), 2016.
  8. "Evaluating and Extending Theories of Choice Under Risk," (with I. Puri), 2021.
  9. "Learning and Equilibrium Refinements," 2022.
  10. "The Transfer Performance of Economic Models," (with Andrews I., Lei L. Liang A., and Wu C.) 2023.
  11. "Risk, Surprise, Randomization, and Adversarial Forecasters," (with R. Corrao and D.K. Levine), 2024.
  12. "Learning, Limited Memory, and Stochastic Choice," (with G. Lanzani and P. Strack), 2024.

## **BOOKS AND MONOGRAPHS**

1. Dynamic Models of Oligopoly (with J. Tirole), Harwood Academic Publishers, 1986, 83 pp. Translated into Italian as Modelli Dinamici di Oligopolio (translated by Gianmaria Martini, edited by A. Giuffre, Testi Scelti di Economia, 1994, Milano: Italy.)
2. Game Theory (with J. Tirole), MIT Press, 1991, 579 pp. Forthcoming translation into Chinese by Renmin University Press, Beijing.
3. The Theory of Learning in Games (with D.K. Levine), MIT Press, 1998, 276 pp, translated into Chinese by Renmin University Press, Beijing.
4. A Long Run Collaboration on Long-Run Games (with D.K. Levine) World Scientific Press, 2009, 391 pages.