

Federico Echenique

Division of the Humanities and Social Sciences
California Institute of Technology
Pasadena, CA 91125

Degrees

PhD Economics 1996-2000, [U.C. Berkeley](#). Advisors: [Ilya Segal](#) and [Chris Shannon](#).
Dissertation Title: “Essays in Monotone Comparative Statics and the Theory of Games of Strategic Complementarities.”

Licenciado en Economía 1990-1995, [Universidad de la República](#).

Employment

Professor of Economics, Division of the Humanities and Social Sciences. California Institute of Technology. 2010 –. (Associate Professor of Economics, 2004-2010; Instructor in Economics, 2002 – 2004.)

Assistant Professor, Departamento de Economía, Facultad de Ciencias Sociales, Universidad de la República. 2000 – 2002.

Assistant Professor. Departamento de Economía, Universidad Torcuato Di Tella, 2001 – 2002.

Visiting Assistant Professor, Department of Economics, U.C. Berkeley, Spring 2001.

Awards

NSF Grant CCF-1101470 “A revealed preference approach to computational complexity in economics,” 2011-2013 Co-PI with Adam Wierrman.

NSF Grant SES-0751980, “Revealed Preference Tests in Individual and Collective Choice,” 2008-2010. Co-PI with Chris Chambers.

Elliot J. Swan Price, 1998. Department of Economics, UC Berkeley.

1996-2000, Graduate Dean’s Fellowship. UC Berkeley.

1996-1998, Fulbright-Laspau Fellowship.

Publications

1. “[The Revealed Preference Theory of Stable and Extremal Stable Matchings](#)” (joint with SangMok Lee, Matthew Shum, and Bumin Yenmez) Forthcoming, [Econometrica](#).

2. “Contracts vs. Salaries in Matching.” *American Economic Review*. Volume 102, Issue 1, February 2012, pages 594-601.
3. “The Money Pump as a Measure of Revealed Preference Violations” (joint with SangMok Lee and Matthew Shum) *Journal of Political Economy*. Vol. 119, No. 6, December 2011.
4. “A Revealed Preference Approach to Computational Complexity in Economics,” joint with Daniel Golovin and Adam Weirman. *Proceedings of the 12th ACM Conference on Electronic Commerce, 2011*.
5. “Testable Implications of Efficiency for Two-Agent (Household) Choice” (joint with Lozan Ivanov). *Journal of Mathematical Economics*. Volume 47, Issue 2, March 2011, pp 129-136.
6. “Testable Implications of Gross Substitutes in Demand” (joint with Chris Chambers and Eran Shmaya). *American Economic Journal: Microeconomics*. Vol. 3, No. 1, February 2011, pp 129-36.
7. “On Behavioral Complementarity and its Implications” (joint with Chris Chambers and Eran Shmaya). *Journal of Economic Theory* Volume 145, Issue 6, November 2010, Pages 2332-2355.
8. “Testing Models with Multiple Equilibria by Quantile Methods” (joint with Ivana Komunjer), *Econometrica*. Volume 77 Issue 4, July 2009, pp 1281-1298.
9. “Sequential Entry in Many-to-one Matching Markets” (joint with Elette Boyle), *Social Choice and Welfare*, Volume 33, issue 1, June 2009, pp 87-99.
10. “English Auctions and the Stolper-Samuelson Theorem” (joint with Juan Dubra and Alejandro Manelli). *Journal of Economic Theory* Volume 144, Issue 2, March 2009, Pages 825-849.
11. “Supermodularity and Preferences” (joint with Chris Chambers). *Journal of Economic Theory* Volume 144, Issue 3, May 2009, Pages 1004-1014.
12. “Ordinal Notions of Submodularity” (joint with Chris Chambers). *Journal of Mathematical Economics* Volume 44, Issue 11, December 2008, pages 1243-1245.
13. “What Matchings can be Stable ? The Testable Implications of Matching Theory.” *Mathematics of Operations Research* Volume 33 Issue 3, August 2008. Pages 757-768.
14. “Profit Maximization and Supermodular Technology” (joint with Chris Chambers). *Economic Theory* Volume 40, Number 2, August, 2009, pp 173-183.

15. "An Explanation of Inefficient Redistribution: Transfers Insure Cohesive groups" (joint with Jon Eguia). *Quarterly Journal of Political Science*. Volume 2, Issue 4, November, 2007, pages 287-305.
16. "The Correspondence Principle." The New Palgrave Dictionary of Economics, 2nd Edition (Forthcoming in 2008). Editors: Steven D. Durlaud and Lawrence E. Blume. Palgrave MacMillan.
17. "A Measure of Segregation Based on Social Interactions" (joint with Roland Fryer). *Quarterly Journal of Economics*. Volume 122, Issue 2, May 2007, pages 441-485.
18. "A Solution to Matching with Preferences over Colleagues" (joint with M. Bumin Yenmez). *Games and Economic Behavior*. Volume 59, number 1, April 2007, pages 46-71.
19. "Finding All Equilibria in Games with Strategic Complements." *Journal of Economic Theory*. Volume 135, Issue 1, July 2007, Pages 514-532.
20. "Counting Combinatorial Choice Rules." *Games and Economic Behavior*. Volume 58, Issue 2, February 2007, Pages 231-245..
21. "Is School Segregation Good or Bad?" (joint with Roland Fryer and Alex Kaufman) *American Economic Review, Papers and Proceedings*, Volume 96, Issue 2, May 2006, Pages 265-269.
22. "A Theory of Stability in Many-to-many Matching Markets" (joint with Jorge Oviedo) *Theoretical Economics*. Volume 1, Issue 2, June 2006, Pages 233-273.
23. "A Constructive Proof of Tarski's Fixed-point Theorem," *International Journal of Game Theory*. Volume 33, Issue 2, June 2005, Pages 215-218.
24. "Mixed Equilibria in Games of Strategic Complements are Unstable" (with Aaron Edlin). *Journal of Economic Theory*. Volume 118, Issue 1, September 2004, Pages 61-79.
25. "Core Many-to-one Matchings by Fixed Point Methods" (with Jorge Oviedo) *Journal of Economic Theory*. Volume 115, Issue 2, April 2004, Pages 358-376
26. "Measurability is not about Information" (with Juan Dubra) *Mathematical Social Sciences*. Volume 47, Issue 2, March 2004. Pages 177-185.
27. "A Weak Correspondence Principle for Models with Complementarities," *Journal of Mathematical Economics* Volume 40, Issues 1-2, pages 145-152, February 2004.
28. "A Characterization of Strategic Complementarities" *Games and Economic Behavior*. Volume 46, Issue 2, Pages 325-347, February 2004.

29. “Extensive-Form Games of Strategic Complementarities” *Games and Economic Behavior* Volume 46, Issue 2, Pages 348-364, February 2004.
30. “Strong Comparative Statics of Equilibria” (with Tarun Sabarwal). *Games and Economic Behavior*. Volume 42, Issue 2, Pages 307-314, February 2003.
31. “Mixed Equilibria in Games with Strategic Complementarities.” *Economic Theory* v22(1) 2003, pp33-44.
32. “The Equilibrium Set of a Two-player game with Complementarities is a Sublattice.” *Economic Theory* v22(4) 2003, pp903-905.
33. “Comparative Statics by Adaptive Dynamics and The Correspondence Principle.” *Econometrica* v70(2), pp 833–844. March, 2002.
34. “Monotone Preferences over Information” (with Juan Dubra). *Topics in Theoretical Economics*: Vol. 1, No. 1, Article 1.
35. “Are Stabilization Programs Expansionary ?” (with Alvaro Forteza). *Estudios Económicos* v15(1), January-June, 2000.

Non-refereed publications

36. “Complexity and Economics: computational constraints may not matter,” joint with Daniel Golovin and Adam Weirman, ACM SIGecom Exchanges, Volume 10, Number 1, March 2011.

Working Papers

1. “Testable Implications of Bargaining Theories” (joint with Chris Chambers), Caltech SS Working Paper 1348.
2. “Finding a Walrasian equilibrium is easy for a fixed number of agents” (joint with Adam Wierman), Caltech SS Working Paper 1354.
3. “General Revealed Preference Theory” (joint with Chris Chambers and Eran Shmaya). Caltech SS Working Paper 1332.
4. “The Axiomatic Structure of Empirical Content” (joint with Chris Chambers and Eran Shmaya), Caltech SS Working Paper 1317.
5. “An Experimental Study of Decentralized Matching” (joint with Leeat Yariv).
6. “Clearinghouses for Two-Sided Matching: An Experimental Study” (joint with Alistair Wilson and Leeat Yariv). Caltech SS Working Paper 1315.

7. “When does aggregation reduce uncertainty aversion?” (joint with Chris Chambers) Caltech SS Working Paper 1299.
8. “Core Matchings of Markets with Transfers” (joint with Chris Chambers) Caltech SS Working Paper 1298.
9. “You Won’t Harm Me If You Fool Me” (joint with Eran Shmaya) Caltech SS Working Paper 1281.
10. “A Test for Monotone Comparative Statics” (joint with Ivana Komunjer) Caltech SS Working Paper 1278.

Advising

Graduate Students: SangMok Lee, Laurent Mathevet, Emerson Melo, and Noah Myung (advisor); Paul J. Healy, Jernej Copic, Serkan Kucuksenel, Shankar Kalyanaram (computer science), David Young, Guido Maretto, and Mohamed Mostagir (dissertation committee member).

Undergraduate Research Advisor: Elette Boyle, Patrick Hummel, Lozan Ivanov, Brett Kassof, Kevin Trotter, and M. Bumin Yenmez.

Institute Service

- Director of graduate studies (and placement officer), Division of the Humanities and Social Sciences, from Summer of 2011.
- Undergraduate curriculum committee (from fall '07; chair since fall '08)
- Graduate admissions comm. ('03, '04, '05, '07, '08, 2012)
- Graduate program comm. (06/07 and 07/08)
- Recruiting comm. (06/07, 07/08, 08/09) (chair in 08/09)
- Institute Housing program committee (2003)
- SISL steering committee (2006–)

Professional service

Co-editor: Journal of Theoretical Economics.

Editorial Board: Economic Theory, and Dynamics and Games in Science.

Conferences: Co-organizer of: the Caltech Mini-conferences on repeated games, political economy, social networks and matching theory (2005-2008); the Caltech mini-conference on decision theory (2012); the Southwest Economic Theory Conference in Caltech, 2009; the Ticino Conference on Matching theory (2012).

Program Committees: Decentralization Conference (2009), Latin American Econometric Society Meetings (2009, 2012), Latin American Economic Association meetings (2010), Society for Algorithmic Game Theory (2009), ACM Conference on Electronic Commerce (2012).

Referee for over 30 different journals and grant agencies. Excellence in refereeing award, American Economic Review, in 2011.