# **MAREK PYCIA**

University of Zurich, Department of Economics, Blümlisalpstrasse 10, 8006 Zurich http://www.econ.uzh.ch/en/people/faculty/pycia.html

## **EMPLOYMENT**

Professor of Organizational Economics, University of Zurich, 2017-present.

Associate Professor of Economics, UCLA, 2016-2018.

Visiting Associate Research Scholar and Visiting Assistant Professor of Economics, Princeton University, 2015-2016.

Assistant Professor of Economics, UCLA, 2008-2016.

Assistant Professor of Economics, Pennsylvania State University, University Park, 2006-2008.

Instructor 1997-99, Koźmiński University, Warsaw.

## **EDUCATION**

Ph.D. in Economics, Massachusetts Institute of Technology, 2006.

Diplôme Européen d'Economie Quantitative Approfondie, University of Toulouse 1, 1999-2001.

Doktorat in Mathematics, Polish Academy of Sciences, Warsaw, 1998.

Certificat d'introduction au droit français et européen, University of Poitiers and University of Warsaw, 1998.

Magister (the first undergraduate degree), summa cum laude, University of Warsaw, 1997.

## **PUBLICATIONS**

**Technological Change and Market Design**. Forthcoming in J-F. Laslier, H. Moulin, R. Sanver, and W. S. Zwicker, eds., *Future of Economic Design*, Springer Series on Studies in Economic Design. Springer 2018.

A Pseudo-Market Approach to Allocating with Priorities, with Y. He, A. Miralles, and J. Yen. *American Economic Journal: Microeconomics* 10(3), 272-314 (August 2018).

Vouchers for Future Kidney Transplants to Overcome 'Chronological Incompatibility' Between Living Donors and Recipients, with J. Veale, A. Capron, N. Nassiri, G. Danovitch, H. A. Gritsch, A. Waterman, J. Del Pizzo, J. Hu, S. McGuire, M. Charlton, and S. Kapur. *Transplantation* 101(9), 2115-2119 (September 2017).

Vouchers were featured in The Boston Globe, CBS, CNN, Fox News, Huffington Post, New Scientist, Reuters, USA Today, The Wall Street Journal, and other outlets.

**Incentive Compatible Allocation and Exchange of Discrete Resources,** with U. Unver. *Theoretical Economics* 12, 287-329 (January 2017).

Related note: *Theoretical Economics* Online Supplement to "Incentive Compatible Allocation and Exchange of Discrete Resources."

Manipulability of Stable Mechanisms, with P. Chen, M. Egesdal, and M. B. Yenmez. *American Economic Journal: Microeconomics* 8(2), 202-214 (May 2016).

Median Stable Matchings in Two-Sided Markets, with P. Chen, M. Egesdal, and M. B. Yenmez. *Games and Economic Behavior* 97, 64-69 (May 2016).

**Decomposing Random Mechanisms**, with Utku Unver. *Journal of Mathematical Economics* 61, 21–33 (August 2015).

**Demand Reduction and Inefficiency in Multi-Unit Auctions**, with L. Ausubel, P. Cramton, M. Rostek, and M. Weretka. *Review of Economic Studies* 81(4), 1366-1400 (October 2014).

**Outside Options and the Failure of the Coase Conjecture**, with Simon Board, *American Economic Review* 104(2), 656–671 (February 2014).

**Stability and Preference Alignment in Matching and Coalition Formation**, *Econometrica*, 80(1), 323-362 (January 2012).

Related note: *Econometrica* Online Supplement to "Stability and Preference Alignment in Matching and Coalition Formation."

Linear Functional Inequalities, *Dissertationes Mathematicae* 438 (2006), 1-62. The Polish Mathematical Society's Marek Kuczma Award for the best paper on functional equations, inequalities, and discrete dynamical systems written by a Polish author.

Czy Kalifornijczycy Są Szczęśliwsi? O Znaczeniu Badań Daniela Kahnemana i Amosa Tversky'ego dla Teorii Ekonomii, *Journal of Management and Business Administration. Central Europe* 12(1) (January-February 2004).

**Dynamic Inconsistency and Self-Control: A Planner-Doer Interpretation**, with Roland Bénabou, *Economic Letters* 77(3), 419-424 (November 2002).

**A Direct Proof of the Regularity of** *s***-Convex Functions**, *Aequationes Mathematicae* 61 (2001), No. 1-2, 128-130.

A Convolution Inequality, *Aequationes Mathematicae* 57 (1999), No. 2-3, 185-200. The Polish Mathematical Society's Marek Kuczma Award for one of the three best papers on functional equations, inequalities, and discrete dynamical systems written by a Polish author.

**Z Uśmiechem w XXI Wiek. Wizja Rozwoju Gospodarki Polskiej do Roku 2005**, with W. Kozioł and D. Wierzba, *Rzeczpospolita* 257, 7 (26 November 1996).

**Positive Homogeneous Functionals Related to LP-Norms**, with Janusz Matkowski, *Journal of Mathematical Analysis and Applications* 200 (1996), 245-253.

**On the Volume of Convex Hulls of Sets on Spheres**, with R. Latała, *Geometriae Dedicata* 63 (1996), 153-157.

**A Proof of a Conjecture of Bobkov and Houdré**, with Stanisław Kwapień and Walter Schachermayer, *Electronic Communications in Probability* 1 (1996), 7-10.

**Polska w Roku 2010. Projekcja Pesymistyczna**, with P. Dubno, L. Grochowski, J. Karnowski, D. Karwacki, A. Leszczynski, M. Nowakowski, A. Olech, P. Osiecki, M. Tokarski, J. Vogtt, G. Zawada.

Rzeczpospolita 253, 4-5 (31 October 1995).

On (a,a)-Convex Functions, with Janusz Matkowski, Archiv der Mathematik 64 (1995), 132-138.

**Convex-like Inequality, Homogeneity and a Characterization of LP-Norm**, with Janusz Matkowski, *Annales Polonici Mathematici* 60 (1995), 221-230.

**Nierownosci Funkcyjne**, *Delta* 3 (1993), 4-5. (The Polish Mathematical Society's Gold Medal for the Best Research Paper Written by a High-School Student).

**On a General Solution of Finite Order Difference Equations with Constant Coefficients**, *Archivum Mathematicum* 28 (1992), 237-240.

#### **WORKING PAPERS**

**Obvious Dominance and Random Priority,** with P. Troyan.

Revision requested by the *Econometrica*.

- **Ordinal Efficiency, Fairness, and Incentives in Large Markets**, with Q. Liu. Revision requested by the *Review of Economic Studies*.
- Matching with Externalities, with M. B. Yenmez.

Revision requested by the *Review of Economic Studies* as a new submission ("reject and resubmit"). Abstract published in the *Proceedings of The Third Conference on Auctions, Market Mechanisms and Their Applications.* 

Efficient Bilateral Trade, with R. Garratt.

Abstract published in the Proceedings of The Third Conference on Auctions, Market Mechanisms and Their Applications.

**Pay-As-Bid: Selling Divisible Goods**, with K. Woodward. Abstract published in the *Proceedings of the ACM Conference on Economics and Computation EC'16*.

#### **Invariance and Matching Markets Outcomes.**

- **Prices and Efficient Assignments without Transfers**, with A. Miralles. Revision requested by the *Journal of Economic Theory*.
- Large vs. Continuum Assignment Economies, with A. Miralles. Revision requested by *Games and Economic Behavior*.

#### The Cost of Ordinality.

- Arrovian Efficiency in Allocation of Discrete Resources, with U. Unver. Revision requested by the *Journal of Economic Theory* as a new submission ("reject and resubmit").
- Quantile Stable Mechanisms, with P. Chen, M. Egesdal, and M. B. Yenmez. Part of this paper is subsumed by "Median Stable Matchings in Two-Sided Markets," with the same coauthors.
- Directed Search and the Futility of Cheap Talk, with K. Mirkin.

Efficient Trade with Interdependent Values, with P. Wang.

Swaps on Networks.

Non-Existence Result for Matching Games with Transfers.

#### MAREK PYCIA

Outside Options in Neutral Discrete Resource Allocation, with U. Unver.

Trading Cycles for School Choice, with U. Unver.

Assignment with Multiple-Unit Demands and Responsive Preferences.

Ordinal Efficiency, Fairness, and Incentives in Large Multi-Unit-Demand Assignments.

**Dynamic Games: The Lack of Robustness.** 

Stochastic vs Deterministic Mechanisms in Multidimensional Screening.

## **TEACHING**

Undergraduate Courses:

Introduction to Market Design, U Zurich.

Designed Markets, UCLA (Warren C. Scoville Distinguished Teaching Award, Spring 2017 and Winter 2014; and the highest student course evaluation among UCLA undergraduate economics courses, Spring 2013).

Fiat Lux Seminar on Game Theory and Martial Arts, UCLA.

Fiat Lux Seminar on the Winner's Curse (co-taught with Santiago Sautua), UCLA.

Advanced Industrial Organization, UCLA.

The Economics of the Corporation, Penn State.

Organizational Economics, Koźmiński U.

Introduction to Finance, Koźmiński U.

Corporate Finance, Koźmiński U.

#### Ph.D. Courses:

Research in Microeconomics, U Zurich Market Design (a.k.a. General Equilibrium and Game Theory), U Zurich, UCLA and Penn State. Game Theory (Part 2), Princeton U. Asset Prices, Forecasting, and Learning, UCLA. Advanced Microeconomic Theory, Penn State. Mathematics for Incoming PhD Students in Economics and Management, M.I.T.

#### **STUDENTS**

#### Ph.D. Students with whom I worked as an advisor:

Alexey Kushnir (now an Assistant Professor at Carnegie Mellon).
Paulo Braulio (now at Credit Suisse Brasil).
Kyle Woodward (now an Assistant Professor at UNC Chapel Hill).
Omer Ali (now at the Analysis Group).
Byeong-hyeon Jeong (currently in the program at UCLA).
Alexei Smirnov (co-advisor; currently in the program at U Zurich).
Shangen Li (currently in the program at U Zurich).

## MAREK PYCIA

#### Ph.D. Students with whom I worked as a committee member or letter writer:

Kenneth Mirkin (now a post-doc at U Edinburgh/European University Institute).
James Fisher (now at USAA).
Tiago Caruso (now at Uber).
Jen Wen Chang (now an Assistant Professor at CSU Fullerton).
Gregory Kubitz (now a Visiting Assistant Professor at NYU Stern).
Simpson Zhang (now at the US Department of Treasury).
Marcos Menchaca (now an Assistant Professor at CSU Northridge).
Xinyu Fan (now at the Cheung Kong Graduate School of Business).
Yingju Ma (currently in the program at UCLA).

## Undergraduate Students with whom I wrote joint papers:

Peter Chen (subsequent Ph.D. program: U Chicago Finance).

Michael Egesdal (subsequent Ph.D. program: Harvard U Economics).

Peng Wang (subsequent Ph.D. program: Princeton U Economics).

## **PRESENTATIONS**

- 2018 and forthcoming: Oxford, EUI Florence, FU/ESMT/TU/HU Berlin, U Zielona Gora, U Zurich, Arne Ryde Workshop on Market Design, Aix Marseille, Hurwicz Workshop, U Glasgow, Warsaw Economic Seminar.
- 2017: ZWABT, NYU Econometrics Meets Theory, MATCH-UP (keynote), Matching in Practice (keynote), SSE, Bonn, Barcelona JOCS Talk, UAB, UPV/EHU.
- 2016: North American Winter Meetings of the Econometric Society, Essex, LSE, U Penn, Columbia U, North American Summer Meetings of the Econometric Society, ESSET Gerzensee (focus talk), UCLA, U Zurich, NEGT, CIREQ Microeconomic Conference, U Montreal, NBER Market Design, NYU AD Advances in Mechanism and Market Design.
- 2015: UC Irvine, Duke-UNC, Harvard-MIT, Ohio State U, U Arizona, Canadian Economic Theory Conference, SAET, AMMA, Econometric Society World Congress, Penn State, Princeton, Stanford, UNSW, U Melbourne, ANU, U Western Ontario, U Toronto, NYU.
- 2014: SWET, USC, LSE, UCL, NBER Decentralization Conference, Rochester, NCSU, BC, NEGT, LA Bash.
- 2013: UCLA Center for Engineering Economics, Learning, and Networks, North America Econometric Society Meeting, Market Design and Economic Theory (Seoul), Princeton, Rochester, UC Davis.
- 2012: SWET, Caltech-UCLA Meetings, European Summer Symposium in Economic Theory, Carnegie Mellon-U Pittsburgh, NBER Market Design Workshop, Northwestern.

- 2011: UC Santa Barbara, Columbia, Wisconsin-Madison.
- 2010: Minnesota, UC Berkeley, Al Roth and Marilda Sotomayor Celebration Conference at Duke, NBER Market Design Workshop, BC, Rice, UT Austin, UCSD, Carnegie-Mellon, U Penn.
- 2009: SWET, Washington U.-St Louis, Bonn Mechanism Design Workshop, USC.
- 2008: Econometric Society Winter Meetings, UCLA, Caltech Matching Workshop, Northwestern.
- 2007: SUNY Stony Brook Game Theory Festival, Barcelona Matching Workshop, Pittsburgh, Caltech, UCLA, Rochester.
- 2006: Conference of the Society for Economic Design, SUNY Stony Brook Game Theory Festival, Bonn Matching Conference, Mannheim, UCLA, Penn State, UCL.
- 2005: MIT, Harvard Business School.

Discussant: Bonn Mechanism Design Workshop (2009), Northwestern Workshop on Matching: Findings, Flaws, and Future (2011), Conference in Honor of Jean Tirole, Toulouse (2015), NYU Econometrics Meets Theory (2017).

#### **OTHER PROFESSIONAL ACTIVITIES**

Research Fellow at the Centre for Economic Policy Research (CEPR) (since 2018).

Associate Editor: *Theoretical Economics* (since 2013), *International Journal of Game Theory* (since 2018).

**Referee**: American Economic Journal: Microeconomics, American Economic Review, B.E. Journal of Theoretical Economics, Central European Journal of Mathematics, Decyzje, EC, Econometrica, Economic Letters, Economic Theory, European Economic Review, Games and Economic Behavior, International Economic Review, International Journal of Game Theory, Journal of Economics & Management Strategy, Journal of Economic Behavior and Organization, Journal of Economic Theory, Journal of the European Economic Association, Journal of Mathematical Economics, Journal of Political Economy, Management Science, Match-Up, Mathematical Social Sciences, Quarterly Journal of Economics, RAND Journal of Economics, Review of Economics and Statistics, Review of Economic Studies, Social Choice and Welfare, Studia Mathematica, Theoretical Economics, and Transactions on Economics and Computation.

Reviewer: National Science Foundation and various universities.

Consultant: New York Federal Reserve Bank (2013).

**Conferences**: Program Committee Co-Chair for the Fifth International Conference on Matching under Preferences MATCH-UP 2019, and Program Committee Member for the ACM Conferences on Economics and Computation EC'16, EC'17 and for the 2018 Annual Congress of the European Economic Association.

**Short-term Visits**: U Rochester (Wallis visitor, September 2014), NY Fed (November 2013), UCSB (Winter 2013 and Fall 2011), Northwestern (visitor at the Center for Economic Theory, October/November 2012), Columbia (PER visitor, April 2011), Microsoft Research (October 2010), U Bonn (Summer 2009), Koźmiński University (Warsaw, Summer 2007).

**Polish Children's Fund** (1992-1999): member of the Supervisory Board, the editor of the Bulletin, organizer of workshops and conferences, instructor and tutor.

**European Union Young Scientists' Contest** (1995-1998): the Secretary of the Jury of the Polish Sub-Contest.

## AWARDS

Warren C. Scoville Distinguished Teaching Award, UCLA (Winter 2014, Spring 2017).

American Economic Review Excellence in Refereeing Award (2012, 2017).

M.I.T. Industrial Performance Center Grant, MacArthur Research Network on Economic Inequality and Social Interactions Fellowship for Junior Scholars, Castle Krob Fellowship, and Presidential Fellowship (2001-2005).

Russell Sage Fellowship for the Summer Institute of Behavioral Economics at UC Berkeley (2000).

The French Ministry of Foreign Affairs Eiffel Scholarship (1999-2001).

Several Polish Mathematical Society's Awards for research in mathematics, including Marek Kuczma (2006 and 1999) and Jozef Marcinkiewicz (1997) Awards.

Stefan Batory Fellowship at Oxford (1997).