Curriculum Vitae

Alexey Kushnir
Tepper School of Business,
Carnegie Mellon University,
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Personal information
Born in Moscow, Russia
Male (he/him), married,
one daughter
US and Russian citizen

POSITIONS HELD

2020-	Associate Professor of Economics, Tepper School of Business, Carnegie Mellon University
2014-20	Assistant Professor of Economics, Tepper School of Business, Carnegie Mellon University
2010-14	Senior Research Associate, Department of Economics, University of Zürich, Blumlisalpstrasse 10, Zurich, 8006, Switzerland

OTHER POSITIONS

September 2023-	Affiliated Member, Institute for Complex Social Dynamics at Carnegie Mellon University
August-December 2018	Visiting scholar, New Economic School and Higher School of Economics, Moscow, Russia
October 2013	Visiting scholar, Northwestern University, Northwestern Center for Economic Theory
March-May 2010	Visiting scholar, Harvard Business School
August-September 2009	Visiting scholar, Boston College
May-August 2007	Economist, Center of Economic and Financial Research, Moscow, Russia

PUBLICATIONS

Articles in refereed journals:

1. Kushnir, A. (2013). Harmful signaling in matching markets. *Games and Economic Behavior*, 80, 209–218.

2. Coles, P., Kushnir A. & Niederle, M. (2013). Preference signaling in matching markets. *American Economic Journal: Microeconomics*, 5(2), 99–134.

3. Gershkov, A., Goeree, J. K., Kushnir, A., Moldovanu, B., & Shi, X. (2013). On the equivalence of Bayesian and dominant strategy implementation. *Econometrica,* 81(1), 197–220.

4. Kushnir, A. (2015). On sufficiency of dominant strategy implementation in environments with correlated types. *Economics Letters*, 133, 4–6.

5. Goeree, J. & Kushnir, A. (2016). Reduced Form Implementation for Environments with Value Interdependencies, *Games and Economic Behavior,* 99, 250–256.

6. Kushnir, A. & Liu, S. (2019). On the equivalence of Bayesian and dominant strategy implementation for environments with non-linear utilities. *Economic Theory,* 1-28.

7. Kushnir, A. & Liu, S. (2020). On linear transformations of intersections. *Set-Valued and Variational Analysis: Theory and Applications,* 28, 475-489.

8. Kushnir, A., Tarasov, A., and Zubrickas, R. (2021). On equilibrium in monopolistic competition with endogenous labor. *Economics Letters*, 201, 109774.

9. Kushnir, A. & Lokutsievskiy, L. (2021). When is a monotone function cyclically monotone?. *Theoretical Economics*, 16(3), 853-879.

10. Goeree, J. & Kushnir, A. (2023). A geometric approach to mechanism design. *Journal of Political Economy Microeconomics*, 1(2), 321-347.

11. Krishnamoorthy, V., & Kushnir, A. (2024) A Simple Characterization of Supply Correspondences, *Mathematics of Operations Research,* 49(2), 826-831.

12. Kushnir, A. & Zurbrickas, R. (2024). Optimal labor income taxation with the dividend effect. *Economic Theory.*

Completed Working Papers:

13. Kornbluth, D. & Kushnir, A. (2024). Undergraduate course allocation through competitive markets. *R&R American Economic Review.*

Work in Progress:

14. Kushnir, A. & Shourideh, A. (2024). Selling with network flows: a new approach to optimal multi-dimensional mechanisms.

15. Kushnir, A. & Sandomirskiy, J. (2024). Optimal auction design for objects with multiple attributes.

16. Kushnir, A., Lokutsievskiy, L. & Zheglov, S. (2024) Multi-dimensional contract design.

Other research contributions:

17. Schweyer, A., Fan, A., Ford, E., Kang, J. & Kushnir, A. (2022) Decentralized Workforce: Fundamental Drivers and Engagement in *the New Workplace, Incentives Research Foundation report.*

18. Kushnir, A. & Xiao, J. (2009). Solutions Manual for Vijay Krishna's Auction Theory Book (2nd edition).

19. Fedukin, I., Kushnir, A. & Zhuravskaya, E. (2007). Orphans and Children Deprived From Parental Care. CEFIR working papers (in Russian).

20. Kushnir, A. (2006). Collective Action Problem in Revolutions, Best Student Papers NES (in Russian).

Commentary in Newspapers and Magazines:

21. The Tartan: Richard Thaler Receives Nobel Memorial Prize in Economics, Oct 15, 2017, Link

Google Citations: 458

EDUCATION

2010	PhD in Economics, The Pennsylvania State University, State College, PA, "Preference Signaling in Matching Markets" (Committee: Marek Pycia, co-advisor; Vijay Krishna, Co-advisor; Kalyan Chatterjee; Tymofiy Mylovanov; Gary Bolton)
2006	Master of Arts in Economics (Cum Laude), New Economic School, Moscow, Russia
2006	Master of Science in Physics and Mathematics (with Honors), Moscow Institute of Physics and Technology, Moscow, Russia
2004	Bachelor of Science in Physics and Mathematics (with Honors), Moscow Institute of Physics and Technology, Moscow, Russia

PROFESSIONAL ACTIVITIES

Invited talks at conferences

"Undergraduate Course Allocation through Competitive Markets," Conference on Mechanism and Institution Design, Budapest, Hungary (July 2024)

"Undergraduate Course Allocation through Competitive Markets," Seminar in Economic Theory, Warwick, UK (September 2022)

"Undergraduate Course Allocation through Competitive Markets," Information Economics Workshop, Moscow, Russia (December 2022)

"When is a Monotone Function Cyclically Monotone?", SSES Annual Congress, Switzerland (June 2021)

"On the Equivalence of Weak- and Cyclic-Monotonicity", SEA Conference, USA (November 2019)

"Monotonicity and Implementation: Beyond Convex Domains," Mechanism Design Conference, Vanderbilt University, (September 2016)

"The Geometric Approach to Mechanism Design," 2014 Cowles Foundation Theory Conference, Yale University (June 2014)

"On the Equivalence of Bayesian and Dominant Strategy Implementation," York Economic Theory Workshop (March 2013)

"On the Equivalence of Bayesian and Dominant Strategy Implementation," Maastricht University "Recent Developments in Market Design" Workshop (September 2011)

Conference talks (peer-reviewed)

"Undergraduate Course Allocation through Competitive Markets," 6th Workshop on Preferences under Matching, Vienna, Australia, (August 2022)

Conference (session-organizer)

Society for the Advancement of Economic Theory 2021, 2022, 2023

Seminars at academic institutions

2024-2025: Princeton, University of Southern California, NES Alumni Brown Bag, Toulouse School of Economics (scheduled), Universidad Carlos III de Madrid (scheduled), Universitat Autònoma de Barcelona (scheduled), University of Zurich (scheduled), Royal Holloway (scheduled), Bocconi University (scheduled), European University Institute (scheduled), The Moroccan Center for Game Theory (scheduled), Virtual Market Design Seminar (scheduled), HKUST (scheduled), CUHK (scheduled)

2021-2023: Yale University, University of Michigan, Institute for Complex Social Dynamics at CMU, New Economic School, Higher School of Economics, International College of Economics and Finance, Moscow School of Management Skolkovo

2016-2020: Harvard/MIT, Princeton University, Berkeley, New York University, Duke/University of North Carolina, Vanderbilt University, Copenhagen Business School, Johns Hopkins University, University of Pittsburgh, Frankfurt School of Finance and Management, University of Bern, University of Cologne, University of Lausanne, University of Zurich, Tsinghua University, New Economic School, Higher School of Economics (Moscow), Nazarbaev University, Yandex Research Seminar, Moscow State University (Math Department)

2011-2015: Northwestern, Caltech, Carnegie Mellon University, University of Michigan, University of Wisconsin-Madison, Penn State, University of Rochester, UC Davis, Ohio State University, University of Pittsburgh, HEC Paris, Bocconi University, University College London, Paris School of Economics, University of Toronto, Ecole Polytechnique, University of Western Ontario, University of York, University of St. Andrews, University of Montreal, University of Saint-Galen, Humboldt University, Sciences Po, New Economic School, Higher School of Economics, University of Leicester

2005-10: UCLA, Boston College, University of Zurich, University of Autonoma, New Economic School, Higher School of Economics, Max Plank Institute (Bonn)

Other conference talks (not invited, not reviewed)

2024-2025: North American Winter Meeting of the Econometric Society, North American Summer Meeting of the Econometric Society, Canadian Economic Theory Conference, Coalitional Theory Network, Pennsylvania Economic Theory Conference, Social Choice and Welfare, 12th Oligo Workshop, Stony Brook International Conference on Game Theory, Conference on Mechanism and Institution Design, World Congress of the Game Theory Society (scheduled)

2021-2023: North American Winter Meeting of the Econometric Society, LACEA LAMES Annual Meeting, The NBER New Directions in Market Design Conference, Matching in Practice (Lausanne), EEA-ESEM, North American Summer Meeting of the Econometric Society, Conference on Mechanism Design and Institution Design, Stony Brook Conference, World Congress of the Game Theory Society, European Winter Meetings of the Econometric Society

2016-2020: CMID conference, ASSA Meetings, SEA Conference, Pennsylvania Economic Theory Conference, 29th International Conference on Game Theory in Stony Brook, IX Moscow International Conference on Operations Research, CIREQ Montréal Microeconomic Theory Conference, Decentralization Conference at Brown, North American Econometric Society Meeting, European Econometric Society Meeting

2011-2015: The Cowles Foundation conference, North American Econometric Society Meetings, World Congress of the Game Theory Society, European Econometric Society Meeting, NES 20th Anniversary Conference, Maastricht University Market Design Workshop, Matching in Practice (Berlin), SAET, UECE Lisbon Meeting, International Conference European Meeting on Game Theory

2005-10: Fifth PhD Presentation Meeting, ADRES Conference (Lyon), 14th Coalition Theory Network Workshop, Midwest Economic Theory Meeting, Society of Economic Design, SUNY Stony Brook, XIX New Economic School Conference, XLVIII Moscow Institute of Physics and Technology Conference

Membership in Professional Societies, Honorary Fraternities

Member, American Economic Association,
Member, Econometric Society
Member, Society for the Advancement of Economic Theory
Member, Society for Social Choice and Welfare
Member, Royal Economic Society

Awards, Prizes, Honors

Foscolo Fellowship, €120000 for 2 years, declined due to Carnegie Mellon position (2014)
European Science Days, 2nd prize (€1500) for paper "Harmful Signaling in Matching Markets" (2010)
New Economic School, Best Student Paper Award (2006)

EDITORIAL ROLES

Referee service
American Economic Review, Econometrica, Review of Economic Studies, Quarterly Journal of Economics, Journal of Economic Theory, Theoretical Economics, American Economic Journal: Micro, Games and Economic Behavior, Economic Theory, Journal of European Economic Association, International Economic Review, Management Science, Operations Research, Mathematics of Operations

Research, Quantitative Economics, International Journal of Game Theory, Journal of Economic Behavior & Organization, Journal of Mathematical Economics, Social Choice and Welfare, Economics Letters, European Economic Review, Journal of Economics & Management Strategy, Scandinavian Journal of Economics, Southern Economic Journal, Mathematical Social Sciences, Review of Economic Design, The B.E. Journal of Theoretical Economics, Elsevier

TEACHING: COURSES TAUGHT AND RATINGS (at Carnegie Mellon)

<u>**Teaching Experience**</u>
Carnegie Mellon University, Tepper School of Business
  75 915 (MBA) Managing though Incentives, 3 minis
  73 100 Principle of Economics (2 sections), 3 semesters
  73 102 Principle of Microeconomics (2 sections), 1 semester
  73-315 Market Design, 2 semesters
  73 341 Within the Firm: Managing though Incentives, 8 semesters.
  73 347 Game Theory Application for Economics and Business, 2 semesters
  47 817 Microeconomics II, 4 minis
University of Zurich
  Economic Foundations of Finance, 1 semester
  Mechanism design, 2 semesters
  Microeconomics for Research Students, 2 semesters
Pennsylvania State University
  Introductory Microeconomic Analysis and Policy, 1 semester
  Introductory Econometrics, 1 semester
New Economic School/Higher School of Eocnomics
  Machine Learning, 1 semester
  Microeconomics (Market and Mechanism design), 1 semester

<u>**New Courses**</u>
73 341 Within the Firm: Managing through Incentives (Designed, developed, and taught)
75 915 Managing through Incentives (Designed, developed, and taught)

<u>**Development Activities**</u>
Faculty Success Program, Carnegie Mellon University, 2023
AEA Continued Education, 2018, 2019, 2021, 2022
HBP Case Method Teaching Seminar, Pittsburgh, 2015
Online Instructor Certificate, the Pennsylvania State University, 2010

<u>**Awards and Honors**</u>
Richard M. Cyert Award for Excellence in Teaching, Carnegie Mellon University, 2018
Higher School of Economics Best Teacher Award, 2018
The Pennsylvania State University, Department of Economics, Outstanding Undergraduate Instructor Award, 2009

Courses Taught and Ratings (at Carnegie Mellon)

Course Number and Title	Course Year	FCE Instructor Rating	FCE Course Rating	Number of Students Enrolled	Number Responses
(MBA) 75-915 Managing through Incentives	23-24	4.9	4.9	16	12
73-341 Within the Firm: Managing through Incentives	23-24	5.0	4.8	16	4
73-347 Game Theory Applic. for Economics and Business	23-24	4.44	4.5	35	16
(MBA) 75-915 Managing through Incentives	22-23	4.21	4.16	35	18
73-347 Game Theory Applic. for Economics and Business	22-23	4.64	4.73	25	11
(MBA) 75-915A Managing through Incentives	21-22	5.0	5.0	15	7
73-347 Game Theory Applic. for Economics and Business	21-22	4.0	4.0	30	14
73-341 Within the Firm: Managing through Incentives	21-22	4.67	4.67	15	6
73-315 Market Design	20-21	3.86	3.86	12	7
73-341 Within the Firm: Managing through Incentives	20-21	4.25	4.25	6	4
73-315 Market Design	19-20	4.56	4.67	22	9
73-341 Within the Firm: Managing through Incentives	19-20	4.38	4.5	17	8
73-341 Within the Firm: Managing through Incentives	18-19	4.2	4.2	19	10
73-102 1 Principles of Microecon.	17-18	4.26	4.07	221	122
73-102 2 Principles of Microecon.	17-18	3.94	3.89	188	116
73-100 1 Principles of Economics	16-17	3.90	3.80	122	56
73-100 2 Principles of Economics	16-17	3.98	3.76	99	43
73-341 Within the Firm: Managing through Incentives	16-17	4.88	4.88	15	8
73-100 1 Principles of Economics	15-16	3.68	3.68	136	70
73-100 2 Principles of Economics	15-16	3.95	4.05	109	61
73-341 Within the Firm: Managing through Incentives	15-16	4.27	4.20	20	15
73-100 1 Principles of Economics	14-15	3.55	3.64	126	61
73-100 1 Principles of Economics	14-15	3.54	3.44	117	45
73-341 Within the Firm: Managing through Incentives	14-15	3.63	3.50	20	8

STUDENT SUPERVISION

Undergraduate Student Supervision (at Carnegie Mellon)

Daniel Kornbluth, Co-author, Adviser
> Honor Thesis, "Undergraduate Course Allocation through Competitive Markets" (Spring, 2023)
> Currently: PhD student at Harvard University, Department of Economics

Angela Fan, Co-author, Supervisor
> Research project: "Decentralized Workforce: Fundamental Drivers and Engagement in the New Workplace" (Summer, 2022)
> Currently: PhD student at UCLA, Anderson School of Management

Eric Coolbaugh, Co-adviser
> Honor Thesis: "An Examination of Region Risk Premia for Automotive Securitization Participants" (Spring 2017)

Kamyar Ghiam, Supervisor
> Research project: "Optimal Income Taxation" (Spring 2017)

Doctoral Student Supervision (at Carnegie Mellon)

James Michelson, Adviser
> PhD Thesis: "Optimal Multi-Dimensional Auctions: Conjectures and Simulations" (2024)

Arnav Sood (Summer Paper Reader) (Tepper School of Business) (2022)

Shuya Li, Summer Paper Reader (2016, 2017), Thesis Committee Member
> PhD Thesis: "Incentives, Information, and Dynamic Games: Applications in Corporations and Schools" (Spring, 2022)

Undergraduate Student Supervision (at other Universities)

Simon Agapov, Thesis Committee Member
> Honors Thesis: "The equivalence between Bayesian and dominant strategy implementation in non-linear settings" (New Economic School, Fall 2018)

Master Student Supervision (at other Universities)

Aleksei Beliaev, Thesis Committee Member
> Master Thesis: "Justifiable Contracts under Introspective Unawareness" (New Economic School, 2020)

Doctoral Student Supervision (at other Universities)

Pastrian Contador, Thesis Committee Member
> PhD Thesis: "Matching and Information Design in Marketplaces" (University of Pittsburgh, ongoing)

Chen Yufei, Thesis Committee Member,
> PhD Thesis: "Three Essays on Microeconomic Theory" (University of Pittsburgh, 2023)

Zaruhi Hakobyan, Thesis Committee Member,
    PhD Thesis: "Essays on Networks, Information Economics, and Dynamic Games of Populism and Conflict" (Higher School of Economics/University of Luxemburg, 2020)

Shuo Liu, Co-author, Recommendation Letter Writer
    PhD Thesis: "Information, Incentives and Institutions" (University of Zurich, 2019)
    Currently: Assistant Professor, Guanghua School of Management

Thomas Wüthrich, Supervisor
    Research project: Topics in Market and Mechanism Design (University of Zurich, 2012)

Alexandru Nichifor, Thesis Committee Member,
    PhD Thesis: "Essays in Matching with Money and Networks" (Maastricht University, 2011)
    Currently: Associate Professor, University of Melbourne

SERVICE

Tepper School of Business

Organizer, Economic theory seminar (2016-2017, 2020-2022)
Local coordinator, Pennsylvania economic theory conference (2021-2023)
Member, Economics curriculum review committee (2022-2023)
Member, Undergraduate economics educational affairs committee (2019)
Member, Tier I committee for tenured/untenured/teaching appointments (2014-23), 10 times
Member, Economics faculty recruiting committee (2015-2016, 2017-2018)
Attendee, Meeting candidates, Business Technologies faculty recruiting (2017, 2019, 2022)
Attendee, Graduation, almost every year
Speaker, Tepper webinar – Intelligent Future Series (2022)
Speaker, PT MBA Access Weekend (2022)
Alumni and student events participation (2014-2023), several times
Student Event – Presentation, Advice for PhD students (2015)
Student Event – Presentation, Basecamp (2020)
Student Event – Presentation, Economics colloquium (2021-2022)