

Elena Katok

email: ekatok@psu.edu; home page: <http://www.personal.psu.edu/exk106>

Smeal College of Business
Penn State University
University Park, PA 16802
(814) 863-2180

89 Cherrywood Way
Port Matilda
PA, 16870
(814) 692-7119

ACADEMIC POSITIONS

- 2008- Present Calvin E. and Pamela T. Zimmerman Endowed Fellow and Professor of Supply Chain Management, Smeal College of Business, Penn State University, University Park, PA.
- 2004-2008 Associate Professor with tenure, Smeal College of Business, Penn State University, University Park, PA.
- 2007 Visiting Scholar, University of Cologne, Germany.
- 1999- 2004 Assistant Professor, Smeal College of Business, Penn State University, University Park, PA.
- 2000- 2001 Visiting Scholar, Harvard Business School, Boston, MA
- 1997-1998 Assistant Professor of Operations Research, Division of Economics and Business, Colorado School of Mines, Golden.
- 1996 -1997 Visiting Assistant Professor of Operations Management, School of Management, State University of New York, Binghamton.

EDUCATION

- 1996 Ph.D., Department of Management Science and Information Systems, Penn State University, University Park.
- 1992 MBA, Smeal College of Business, Penn State University.
- 1987 B.S., Business Administration with emphasis in finance and economics, University of California, Berkeley.

RESEARCH EXPERTISE

- Market design and strategic procurement
- Behavioral operations management

TEACHING EXPERTISE

- Operations and supply chain management: strategic procurement, supply chain coordination, inventory management, production planning and scheduling.

HONORS AND AWARDS

- Winner of the 2000 Franz Edelman Award for achievement in the practice of OR&MS.

PUBLICATIONS

1. Zhixi Wan, Damian R. Beil and Elena Katok, When does it pay to delay supplier qualification? *Management Science*, in press (2011).
2. Ernan Haruvy and Elena Katok, Increasing Revenue by Decreasing Information, *Production and Operations Management*, in press (2011).
3. Wedad Elmaghraby, Elena Katok and Natalia Santamaria, A Laboratory Investigation of Rank Feedback in Procurement Auctions, *Manufacturing & Services Operations Management*, in press (2011).
4. Elena Katok and Enno Siemsen, The Influence of Career Concerns on Task Choice: Experimental Evidence, *Management Science*, 2011, 57(6) pp. 1042-1054.
5. Andrew M. Davis, Elena Katok and Anthony M Kwasnica, Do auctioneers pick optimal reserve prices? *Management Science*, 2011, 57(1) pp. 177-192.
6. David Cantor and Elena Katok, The Bullwhip Effect and Order Smoothing in a Laboratory Beergame, *Transportation Research Part E*, in press (2011).
7. Elena Katok and Diana Wu, Contracting in Supply Chains: A Laboratory Investigation, *Management Science*, 2009, 55(12) pp. 1953-1968.
8. Richard Engelbrecht-Wiggans and Elena Katok, A Direct Test of Risk Aversion in First Price Sealed Bid Auctions, *Decision Analysis* 6(2) June 2009, pp. 75-86.
9. Richard Engelbrecht-Wiggans and Elena Katok. Regret and Feedback Information in First-Price Sealed-Bid Auctions, *Management Science*, 2008, 54(4) pp. 808-819.
10. Gary E Bolton and Elena Katok, Learning-by-Doing in the Newsvendor Problem: A Laboratory Investigation of the Role of Experience and Feedback, *Manufacturing and Service Operations Management*, 2008 10(3) pp. 519-538.
11. Elena Katok, Douglas Thomas, Andrew Davis, Inventory Service Level Agreements as Coordination Mechanisms: The effect of review periods, *Manufacturing and Service Operations Management*, 2008 10(4) pp 6-9-624.
12. Elena Katok and Anthony M. Kwasnica, Time is Money: The Effect of Clock Speed on Seller's Revenue in Dutch Auctions, *Experimental Economics*, 2008 11, pp. 344-494.
13. Richard Engelbrecht-Wiggans, Ernan Haruvy and Elena Katok A Comparison of Buyer-Determined and Price-Based Multi-Attribute Mechanisms *Marketing Science*, 2007 26(5) pp. 611-628.
14. Richard Engelbrecht-Wiggans and Elena Katok. Regret in Auctions: Theory and Evidence, *Economic Theory* 2007, 33 pp. 81-101.
15. Anthony M. Kwasnica and Elena Katok, The Effect of Timing on Bid Increments in Ascending Auctions, *Production and Operations Management*, 2007, 16(4) pp. 483-494.
16. Richard Engelbrecht-Wiggans and Elena Katok "e-Sourcing in Procurement: Theory and Behavior in Reverse Auctions with Non-Competitive Contracts," *Management Science* 52(4) April 2006, pp. 581-596.
17. Yan Wu and Elena Katok, Learning, Communication, and the Bullwhip Effect, *Journal of Operations Management* 24(6), December 2006, pp. 839-850.

18. Gary E Bolton, Elena Katok and Axel Ockenfels, Cooperation Among Strangers with Limited Information about Reputation, *Journal of Public Economics* 89(8), August 2005, pp. 1457-1468.
19. Gary E Bolton, Elena Katok and Axel Ockenfels, Trust Among Internet Traders, *Analyses & Kritik*, Vol. 26, December 2004, pp. 185-202.
20. Elena Katok and Alvin E. Roth Auctions of Homogeneous Goods with Increasing Returns: Experimental Comparison of Alternative "Dutch" Auctions, *Management Science* 50(8), August 2004, pp. 1044-1063.
21. Gary E Bolton, Elena Katok and Axel Ockenfels How Effective are Online Reputation Mechanisms? An Experimental Study, *Management Science* 50(11), November 2004, pp. 1587-1602.
22. Elena Katok, William Tarantino and Terry P. Harrison, Investment in Production Resource Flexibility: An Empirical Investigation of Methods for Planning Under Uncertainty, *Naval Research Logistics* 50:2, pp. 105-129, March 2003.
23. Elena Katok, Martin Sefton and Abdullah Yavas, Implementation by Iterative Dominance and Backward Induction: An Experimental Comparison, *Journal of Economic Theory*, 104, pp. 89-103, 2002.
24. Elena Katok, William Tarantino and Ralph Tiedeman, Improving Performance and Flexibility at Jeppesen: The World's Leading Aviation Information Company, *Interfaces Edelman Issue*, 31(1), Jan-Feb 2001.
25. Elena Katok, Andrew Lathrop, William Tarantino and Susan Xu Using Dynamic Programming-Based DSS to Manage Inventory at Jeppesen, *Interfaces*, 30(6), pp. 54-65, Nov/Dec 2001.
26. Elena Katok and Dennis Ott, Using Mixed-Integer Programming to Reduce Label Changes in the World's Largest Single-Site Aluminum Can Manufacturing Facility, *Interfaces*, 30:2, pp. 1-13, March-April 2000.
27. Gary E Bolton, Jordi Brandts and Elena Katok, How Strategy Sensitive are Contributions? A Test of Six Hypotheses in a Two-Person Dilemma Game, *Economic Theory*, 15, pp. 367-387, 2000.
28. Elena Katok, Tomas Serrander and Mattias Wennstrom, Throughput Improvement and Scrap Reduction in Aluminum Can Manufacturing, *Production and Inventory Management Journal*, 49, pp. 36-42, 1999.
29. Elena Katok, Holly S. Lewis and Terry P. Harrison, Lot Sizing in General Assembly Systems with Setup Costs, Setup Times and Multiple Constrained Resources, *Management Science*, 44, pp. 859-877, 1998.
30. Gary E Bolton and Elena Katok, Reinterpreting Arbitration's Narcotic Effect: An Experimental Study of Learning in Repeated Bargaining, *Games and Economic Behavior*, 25, pp. 1-33, 1998.
31. Gary E Bolton, Elena Katok and Rami Zwick, Dictator Game Giving: Rules of Fairness versus Acts of Kindness, *International Journal of Game Theory*, 27, pp. 269-299, 1998.
32. Gary E Bolton and Elena Katok, An Experimental Test of the Crowding Out Hypothesis: the Nature of Beneficent Behavior, *Journal of Economic Behavior and Organization*, 37, pp. 315-331, 1998.

33. Elena Katok, Tomas Serrander and Mattias Wennstrom, Setup Reduction Through Process Improvement in Aluminum Can Manufacturing, *Production and Inventory Management Journal*, 39, pp. 77-82, 1998.
34. Gary E Bolton and Elena Katok, An Experimental Test for Gender Differences in Beneficent Behavior, *Economics Letters*, 48, pp. 287-292, 1995.

REVIEW ARTICLES AND BOOK CHAPTERS

35. Elena Katok, Buyer Determined Procurement Auctions Experiments, *The Oxford Handbook of Market Design*, (Alvin Roth, Nir Vulkan, Zvika Neeman and Muriel Niederle Eds.) Oxford University Press., Oxford, UK, 2011.
36. Elena Katok, Using Laboratory Experiments to Build Better Operations Management Models, *Foundations and Trends^(R) in Technology, Information and Operations Management*, Volume 5, No. 1 2010, pp. 1-84.
37. Elena Katok, Laboratory Experiments in Operations Management, in *TutORials in Operations Research* (J. Geunes Ed.). Presented at the INFORMS Annual Meeting, November 13-16, 2011, Chapter 2, pp. 15-35.
38. Robert F. Bordley, Elena Katok and L. Robin Keller, Honoring Michael H. Rothkopf's Legacy of Rigor and Relevance in Auction Theory: From the Editors, *Decision Analysis* 7(1), March 2010, pp. 1-4.
39. Gary E Bolton, Elena Katok and Axel Ockenfels, Bridging the Trust Gap in Electronic Markets: A Strategic Framework for Empirical Study, in *Applications of Supply Chain Management and E-Commerce Research in Industry* (E. Ackali, J. Geunes, P.M. Pardalos, H.E. Romeijn and Z.J. Shen Eds.) Springer, New York, 2005.
40. Richard Engelbrecht-Wiggans and Elena Katok, Experiments on Auction Valuation and Endogenous Entry, in *Experimental and Behavior Economics, Advances in Applied Microeconomics* (J. Morgan Ed.), Volume 13, Chapter 7, 2005, Elsevier, pp. 171-196.
41. Croson, R., K. K. Donohue, E. Katok and J. Serman, Supply Chain Management: A Teaching Experiment, in Zwick, Rami and Amnon Rapoport (Eds.), *Experimental Business Research, Vol. 3: Marketing, Accounting, and Cognitive Perspectives*. Kluwer Academic Publishers: Norwell, MA and Dordrecht, The Netherlands, 2004.
42. Gary E Bolton and Elena Katok, The Role of Learning in Arbitration: A Laboratory Study, in *Advance in Understanding Strategic Behavior, Game Theory, Experiments and Bounded Rationality, Essays in Honor of Werner Güth* (S. Huck Ed.), 2004, Palgrave MacMillan, pp. 235-257.
43. Gary E Bolton, Jordi Brandts, Elena Katok, Axel Ockenfels and Rami Zwick, Testing Theories of Other-Regarding Behavior: A Sequence of Four Laboratory Studies, in *Handbook of Experimental Economics Results* Chapter 55, (Charles R. Plott and Vernon L. Smith Eds.), North-Holland: Amsterdam, 2008, pp. 488-499.

MANUSCRIPTS UNDER REVIEW (SELECTED)

44. Michael Becker-Peth, Elena Katok and Ulrich Thonemann, Designing Contracts for Irrational but Predictable Newsvendors, *Management Science* (major revision).
45. Andrew M. Davis, Elena Katok and Anthony M Kwasnica, Why Sellers Should Prefer Sequential Mechanisms, *Management Science* (major revision).

46. Rachel Croson, Karen Donohue, Elena Katok and John Sterman, Order Stability in Supply Chains: Coordination Risk and the Role of Coordination Stock, *Production and Operations Management* (major revision).
47. Elena Katok, Valery Pavlov, and Tava Olson, Wholesale Pricing in the Presence of Fairness Concerns and Information Asymmetry, *Production and Operations Management* (minor revision).

PH.D. STUDENTS

- Andrew Davis, 2011, Assistant Professor, The Johnson School, Cornell University, Ithaca, NY.
- Natalia Santamaria, 2011, Assistant Professor, Universidad de Los Andes, Bogota, Columbia.
- Valery Pavlov, 2010, Assistant Professor, School of Business, University of Auckland, New Zealand.
- Diana Wu, 2006, Assistant Professor, School of Business, University of Kansas, Lawrence, KS.

SELECTED FUNDED RESEARCH

The National Science Foundation

- Buyer-Determined Procurement Auctions, \$68,000, PI, September 2009-August 2011.
- Collaborative Research: Procurement Mechanism Design, \$230,000, Co-PI, September 2006 – August 2009.
- Collaborative Research: Investigating Bidding Behavior in Sealed Bid Auctions: Regret, Learning, and Risk Aversion, \$152,000, Co-PI, April 2004 – April 2007.
- Collaborative Research: Behavioral Causes of Information Distortion in Supply Chains, \$103,000, Co-PI, August 2002 – August 2003.
- SBIR Phase I: UNiCAP – Universal Combinatorial Auction Platform, \$106,000, PI, January 2002 – June 2002.

Die Deutsche Forschungsgemeinschaft (DFG)

- Research Group: Design and Behavior – Economic Engineering of Firms and Markets, Co-PI, October 2011-2014. University of Cologne/Goethe Universität Frankfurt am Main/Penn State University <http://economicdesign.uni-koeln.de/home.html>.

The Department of Defense

- Army Deployment Optimization Analysis funded by *Military Traffic Management Command Transportation Engineering Agency*, \$500,000, Co-PI, August 2002 – July 2006
- Deployment optimization research in tools and operations, funded by *Center for Army Analysis*, \$75,000, Co-PI, August 2000 – August 2001

EDITORIAL SERVICE

- Editor of the Special Issue on Behavioral Mechanism Design in Operations Management in *Production and Operations Management*, 2011.
- Editor of the Special “Michael Rothkopf Memorial” Issue on Auctions in *Decision Analysis* (the INFORMS journal), 2010
- Senior Editor *Production and Operations Management*, 2007 – present
- Deputy Editor, *Interfaces* 1999 – 2004.

Referee: *Management Science, Manufacturing and Service Operations Management, American Economic Review, Econometrica, Review of Economic Studies, Games and Economic Behavior, Operations Research, Interfaces, The Economics Journal, Journal of Economic Behavior and Organization, Journal of Mathematical Psychology, Production and Operations Management, Inform Journal of Computing, European Journal of Operational Research, Southern Economics Journal, Journal of Operations Management, Production and Operations Management, Organizational Behavior and Human Decision Processes, European Economic Review, Experimental Economics, RAND., Economic Enquiry.*

PROFESSIONAL SERVICE

- INFORMS Behavioral Operation Management Section, President 2010-present.
- INFORMS Behavioral Operation Management Section, Vice President 2008-2010.
- Co-Organizer of the Michael H. Rothkopf Memorial Conference, at the Smeal College of Business, Penn State University, June 1-3 2009.
- The National Science Foundation DRMS review panel 2004 – 2006.

Annual Behavior Research in Operations Management Conferences:

- Co-organized the First Annual Conference, June 2006, Penn State, Elena Katok and Gary E. Bolton lead local organizers.
- Co-organized the Second Conference, July 2007, University of Minnesota, Karen Donohue lead local organizer.
- Co-organizing the Third Annual Conference, scheduled for July 2008, University of Alberta, Kenneth Schultz lead local organizer.
- Co-organizing the Fourth Annual Conference, scheduled for July 2009, University of Syracuse, Julie Niederhoff lead local organizer.
- Co-organizing the Fifth Annual Conference, scheduled for June 2010, University of Virginia, The Darden School, Anton Ovchinnikov lead local organizer.
- Co-organizing the Sixth Annual Conference, scheduled for June 2011, INSEAD, Christoph Loch lead local organizer.
- Co-organizing the Seventh Annual Conference, scheduled for June 2012, University of Maryland, Wedad Elmaghraby lead local organizer.

INFORMS Organizer:

- 2010 Fall Meeting: Behavioral Operations Management (BOM) cluster (with Enno Siemsen).

- 2009 Fall Meeting: Behavioral Operations Management (BOM) cluster, Auctions track (with Damian Beil).
- 2008 Fall Meeting: session chair
- 2007 Fall Meeting: Behavioral Operations Management (BOM) cluster.
- 2004 Fall Meeting: Auctions track.

Penn State University the Smeal College of Business, and the SC&IS Department:

- SC&IS Department Ph.D. Program coordinator, 2009 - present
- Smeal College Promotion and Tenure Committee:
 - 2008-10 academic year
 - 2005-06 academic year
- Smeal College Graduate Policy Committee, 2009 – 2012.
- Smeal College Academic Integrity Committee, 2010 – present.
- SC&IS Department Promotion and Tenure Committee:
 - 2010-12 academic year
- Associate Member of the Institutional Review Board, July 2007 – present

RECENT PRESENTATIONS (INVITED SELECTED)

- When does it pay to delay supplier qualification?, University of Texas Dallas (January 2012).
- Designing Contracts for Irrational but Predictable Newsvendor, University of Minnesota, (March 2011), Wilfrid Laurier University (April 2011), University of Texas Dallas (September 2011).
- Fairness in Contract, seminar at UCLA, January 2010.
- Buyer-Determined Procurement Auctions, Schloss Dagstuhl Workshop on Computational Social Systems and the Internet, Saarbrücken, Germany (July 2007), University of Innsbruck (June 2007).
- Contracting in Supply Chains. Presented at seminars: INSEAD (April 2007), University of Mannheim (March 2007), Eindhoven (February 2007), University of Cologne (January 2007), the Wharton School (March 2006), the Behavioral Operations Workshops at Harvard/MIT (May 2006).
- Regret in Auctions, presented at University of Bonn (January 2007).
- Buyer-determined auctions. Presented at seminars at the FL State University (September 2005), the University of Michigan (December 2005).
- Learning by Doing. Presented at seminars at the University of Illinois (September 2003) and Cornell (November 2003).

PROFESSIONAL AFFILIATIONS

The Institute for Operations Research and Management Sciences (INFORMS).
Behavioral Operations Management (BOM) Section of INFORMS.
Economic Science Association (ESA).
Production and Operations Management (POM)

PERSONAL

Naturalized U.S. Citizen, 1982.
Born March 27, 1966 Moscow, Russia. Fluent and literate in Russian; Married to Gary Bolton, 1 child.