

# *Curriculum Vitae*

## **James Allen Fill**

Department of Applied Mathematics and Statistics  
(formerly Department of Mathematical Sciences)  
The Johns Hopkins University  
Baltimore, Maryland 21218-2682 USA  
Voice: (410) 516-7219; Fax: (410) 516-7459  
e-mail: jimfill@jhu.edu  
Web: <http://www.ams.jhu.edu/~fill/>

### **Personal**

- Born 16 October 1955 in Elmhurst, Illinois

### **Education**

- Ph.D., Statistics, University of Chicago, 1980
- M.S., Statistics, University of Chicago, 1979
- B.S., Mathematics, Statistics, University of Illinois, 1976; *Summa Cum Laude*; Highest Distinction in Mathematics; Highest Distinction in Statistics; Minor: Computer Science

### **Academic and Other Research Positions (One or More Semesters)**

- Professor, The Johns Hopkins University, Department of Applied Mathematics and Statistics, 1995–
- Professor, The Johns Hopkins University, Department of Computer Science, 2001–2017 (secondary appointment; renewable terms)
- Visiting Researcher, Microsoft Research, Theory Group, Redmond, Washington, Fall, 2001
- Associate Professor, The Johns Hopkins University, Department of Mathematical Sciences, 1991–1995; Assistant Professor, 1988–1991
- Visiting Associate Professor, Massachusetts Institute of Technology, Department of Mathematics, Fall, 1991
- Assistant Professor, Stanford University, Department of Statistics, 1980–1988
- Visiting Assistant Professor, University of Chicago, Department of Statistics, 1986–1987

### **Editorial Positions**

- Editor-in-Chief, *Journal of Theoretical Probability*, 2006–; Co-Editor-in-Chief, 2004–2005; Member of Editorial Board, 2000–2003
- Associate Editor, *Annals of Applied Probability*, 1994–2000, 2006–
- Associate Editor, *Electronic Journal of Probability* and *Electronic Communications in Probability*, 2000–
- Invited Coordinating Guest Editor, special Analysis of Algorithms Issue dedicated to the memory of Philippe Flajolet, *Combinatorics, Probability & Computing*, 2012–2013

## Other Academic Visits

- Invited visitor to Mittag-Leffler Institute (near Stockholm, Sweden), May–June, 2009
- Invited longer-term visitor to Newton Institute, Cambridge, England, August, 2002
- Invited visitor to Mittag-Leffler Institute (near Stockholm, Sweden), May, 1995
- Visiting Scholar, Stanford University, Department of Statistics, Summers, 1989, 1990, 1992

## Nonacademic Positions

- Consultant and Expert Witness for attorney Joel Miller, Baltimore, Maryland, 1993–1994
- Consultant, Innovative Television Incorporated, Stamford, Connecticut, 1993
- Consultant, Kutak Rock & Campbell (law firm), Washington, D.C., 1990–1991
- Consultant, American Institute for Research, Palo Alto, California, 1982–1988
- Data Analyst, American Hospital Association, Division of Research and Statistics, Chicago, Summer, 1974

## Honors

- Election as Fellow, Institute of Mathematical Statistics, 1999
- Graduate Fellowships
  - McCormick Foundation Fellowship, University of Chicago, 1976–1980
  - National Science Foundation Graduate Fellowship, University of Chicago, 1976–1979
- Election to Student Honorary Societies
  - Sigma Xi, University of Chicago, 1978
  - Phi Beta Kappa, University of Illinois, 1976
  - Phi Kappa Phi, University of Illinois, 1976
  - Phi Eta Sigma, University of Illinois, 1973

## Grants while at Johns Hopkins

- Principal Investigator, National Science Foundation Grant DMS-0406104, “Mathematical Sciences and Theory of Computing: Probability and Algorithms,” \$110,000, three years: September 1, 2004 through August 31, 2007
- Principal Investigator, National Science Foundation Grant DMS-0104167, “Mathematical Sciences and Theory of Computing: Studies in Perfect Simulation and Combinatorial Probability,” \$219,000, three years: August 1, 2001 through July 31, 2004
- Principal Investigator, National Science Foundation Grant DMS-9803780, “Mathematical Sciences and Theory of Computing: Probability and Combinatorial Structures,” \$204,437, three years: July 15, 1998 through June 30, 2001
- Principal Investigator, National Science Foundation Grant DMS-9626756, “Mathematical Sciences: Exact Sampling via Markov Chains,” \$64,000, two years: July 1, 1996 through June 30, 1998
- Principal Investigator, National Science Foundation Grant DMS-9311367, “Mathematical Sciences: Markov Chains and Self-Organizing Data Structures,” \$99,000, three years: July 1, 1993 through June 30, 1996
- Principal Investigator, National Security Agency Grant MDA904–89–H–2051, “The Quantification of Limit Theorems in Probability,” \$92,450, two years: July 13, 1989 through July 12, 1991

## Professional Activities

- Representation of professional organizations
  - Representative of Institute of Mathematical Statistics at the inauguration of World Mathematical Year, Washington, D. C., January, 2000
- Committee and panel memberships
  - Invited member, Institute of Mathematical Statistics Committee on Fellows, 2005–2007
  - Invited member, Screening Panel for Statistics and Probability Program, National Science Foundation, December, 2002
  - Invited member, AMS–IMS–SIAM Summer Research Conferences in the Mathematical Sciences Selection Committee, 1999–2002
  - Invited member, Screening Panel for Statistics and Probability Program, National Science Foundation, December, 1999
  - Invited member, Screening Panel for Statistics and Probability Program, National Science Foundation, December, 1998
  - Invited member, Program Advisory Committee, Institute of Mathematical Statistics, 1990–1992
- Meetings organization
  - Invited member, Program Committee, 2012 Southeastern Probability Conference, Duke University, May, 2012
  - Invited member, Program Committee, World Congress in Probability and Statistics (jointly sponsored by the Bernoulli Society and the Institute of Mathematical Statistics) (WCPS08), Singapore, July, 2008
  - Invited member, Program Committee, Workshop on Analytic Algorithmics and Combinatorics (ANALCO08), San Francisco, California, January, 2008
  - Invited organizer, DIMACS Workshop on Markov Chain Monte Carlo: Synthesizing Theory and Practice, Rutgers University, June, 2007
  - Invited member, Program Committee, Workshop on Analytic Algorithmics and Combinatorics (ANALCO07), New Orleans, Louisiana, January, 2007
  - Invited member, Program Committee, Workshop on Analytic Algorithmics and Combinatorics (ANALCO06), Miami, Florida, January, 2006
  - Invited organizer (with Laurent Saloff-Coste), Markov Chains and Random Algorithms, Cornell University, May, 2004
  - Invited member, Programme Committee, Second Colloquium on Algorithms, Trees, Combinatorics and Probabilities, Versailles, France, September, 2002
  - Invited member, Program Committee, Eighth Seminar on the Mathematical Analysis of Algorithms, Strobl (near Salzburg), Austria, June, 2002
  - Invited organizer, Invited Papers Meeting on Perfect Simulation, 53rd Session of the International Statistical Institute, Seoul, Korea, August, 2001
  - Invited organizer, Invited Session on Exact Simulation, IMS 64th Annual Meeting, Atlanta, Georgia, August, 2001
  - Invited organizer, Workshop on Monte Carlo Markov Chains, Directions in Probability Workshop, Institute of Mathematical Statistics, Stanford, California, August, 1993

- Session chairing
  - Chair of session, Eighth Workshop on Markov Processes and Related Topics, Beijing Normal University, Beijing, China, July, 2012
  - Chair of session, 22nd International Meeting on Probabilistic, Combinatorial, and Asymptotic Methods in the Analysis of Algorithms (AofA 2011), Będlewo, Poland, June, 2011
  - Chair of session, 21st International Meeting on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms (AofA 2010), Vienna, Austria, June–July, 2010
  - Chair, second Wald Lecture, World Congress in Probability and Statistics (WCPS08), Singapore, July, 2008
  - Chair of session, Conference on Analysis and Probability, University of Nice Sophia Antipolis, France, June, 2008
  - Chair of session, 2008 Conference on Analysis of Algorithms (AofA 2008), Maresias, Brazil, April, 2008
  - Chair of session, Workshop on Markov-Chain Monte Carlo Methods, Newton Institute, Cambridge, England, March, 2008
  - Chair of session, Analysis of Algorithms 2006 (AofA 2006), Bilzen, Belgium, July, 2006
  - Chair of session, Workshop on Analytic Algorithmics and Combinatorics (ANALCO06), Miami, Florida, January, 2006
  - Chair of session, 2005 International Conference on the Analysis of Algorithms, Barcelona, Spain, June, 2005
  - Chair of session, Workshop on Sharp Thresholds for Mixing Times, American Institute of Mathematics, Palo Alto, California, December, 2004
  - Chair of session, Oberwolfach Mini-Workshop on Probability Theory on Trees and Analysis of Algorithms, Oberwolfach, Germany, August, 2004
  - Chair of session, Tenth Seminar on Analysis of Algorithms, Mathematical Sciences Research Institute, Berkeley, California, June, 2004
  - Chair of session, Research Symposium on Markov Chains: Algorithms, Applications and Theory, University of Durham, England, July–August, 2003
  - Chair of two sessions, Workshop on Randomised Algorithms, Newton Institute, Cambridge, England, August, 2002
  - Chair of session, Eighth Seminar on the Mathematical Analysis of Algorithms, Strobl (near Salzburg), Austria, June, 2002
  - Chair, Invited Papers Meeting on Perfect Simulation, 53rd Session of the International Statistical Institute, Seoul, Korea, August, 2001
  - Chair, Invited Session on Exact Simulation, IMS 64th Annual Meeting, Atlanta, Georgia, August, 2001
  - Chair (substitute), third Wald Lecture (IMS Special Invited Lecture session), Joint Statistical Meetings, Baltimore, Maryland, August, 1999
  - Chair of session, Ninth International Conference on Random Structures and Algorithms, Poznań, Poland, August, 1999
  - Chair of session, Fifth International Seminar on the Mathematical Analysis of Algorithms, Barcelona, Spain, June, 1999
  - Chair of session, Workshop on Monte Carlo Methods, Fields Institute, Toronto, Ontario, Canada, October, 1998

- Chair of session, Warwick Randomised Algorithms and Stochastic Simulation (WRASS) Workshop, University of Warwick, England, July, 1998
- Chair of session, DIMACS-sponsored The Fourth International Seminar on “Average-Case” Analysis of Algorithms, Princeton, New Jersey, July, 1998
- Chair of session, DIMACS Workshop on Microsurveys in Discrete Probability, Princeton, New Jersey, June, 1997
- Chair, Contributed Paper Session, Joint Statistical Meetings, Chicago, Illinois, August, 1996
- Chair of session, Workshop on Probability Models of Coalescing and Clustering, Institute of Mathematical Statistics, Chicago, Illinois, August, 1996
- Chair, Contributed Paper Session on Probability, IMS 58th Annual Meeting, Montreal, Quebec, Canada, July, 1995
- Chair, Session on Quality Control and Reliability, Mid-Atlantic Regional Probability and Statistics Day, Laurel, Maryland, October, 1992
- Professional Society Memberships
  - American Mathematical Society (life member)
  - American Statistical Association (life member)
  - Association for Computing Machinery
  - Institute of Mathematical Statistics (Fellow and life member)
  - Mathematical Association of America
- Referee (Publications)
  - *ACM-SIAM Symposium on Discrete Algorithms*
  - *ACM Symposium on Theory of Computing*
  - *Advances in Applied Probability* and *Journal of Applied Probability* (Applied Probability Trust)
  - *Algorithmica*
  - *American Mathematical Monthly*
  - *American Statistician*
  - *Annals of Applied Probability*
  - *Annals of Probability*
  - *Annals of Statistics*
  - *Australia and New Zealand Journal of Statistics*
  - *Brazilian Journal of Probability and Statistics*
  - *Combinatorics, Probability & Computing*
  - *Electronic Communications in Probability*
  - *Electronic Journal of Probability*
  - *IEEE Symposium on Foundations of Computer Science*
  - *International Journal of Computers and Mathematics with Applications*
  - *Journal of Algorithms*
  - *Journal of the American Statistical Association*
  - *Journal of Graph Theory*
  - *Journal of the London Mathematical Society*
  - *Journal of Statistical Planning and Inference*

- *Journal of Theoretical Probability*
- *Management Science*
- *Mathematics and Computer Science 2004: Algorithms, Trees, Combinatorics and Probabilities*
- *Metron—International Journal of Statistics*
- *Probability in the Engineering and Informational Sciences*
- *Proceedings of the American Mathematical Society*
- *Random Structures and Algorithms*
- *Rocky Mountain Journal of Mathematics*
- *SIAM Journal of Computing*
- *SIAM Journal on Matrix Analysis and Applications*
- *Statistics and Probability Letters*
- *Stochastic Processes and their Applications*
- *Theoretical Computer Science*
- *Workshop on Analytic Algorithmics and Combinatorics (ANALCO)*
- Reviewer (Grant Proposals)
  - National Science Foundation
  - National Security Agency
  - Natural Sciences and Engineering Research Council of Canada
- Reviewer for (and provider of other expert advice to) *Mathematical Reviews*

### Ph.D. Dissertation Advising at Johns Hopkins

- Stephen Chestnut, Ph.D. student, Department of Applied Mathematics and Statistics
  - Third-year Ph.D. student
  - Dissertation area: Markov chains
  - Ph.D. anticipated in Spring, 2014
- Jason Matterer, Ph.D. student, Department of Applied Mathematics and Statistics
  - Fifth-year Ph.D. student
  - Dissertation topic: Symbol comparisons for worst-case FIND
  - Ph.D. anticipated in Spring, 2012
- Vincent Lyzinski, Ph.D. student, Department of Applied Mathematics and Statistics
  - Sixth-year Ph.D. student
  - Dissertation topic: Intertwinings of Markov semigroups and hitting times for Markov chains
  - Ph.D. anticipated in Spring, 2012
- Patrick Bindjeme, Department of Applied Mathematics and Statistics
  - Dissertation: A Repertoire of Cost Functions for the `QuickSort` Algorithm
  - Ph.D. awarded in May, 2012
- Takehiko Nakama, Department of Applied Mathematics and Statistics
  - Dissertation: Analysis of execution costs for `QuickSelect`
  - All requirement for Ph.D. completed in August, 2009; degree conferred in May, 2010.
  - Postdoctoral research fellow, European Center for Soft Computing, Oviedo, Spain, 2010–2013

- Nevin Kapur, Department of Mathematical Sciences
  - Dissertation: Additive functionals on random search trees
  - Ph.D. awarded in May, 2003
  - Instructor (postdoctoral research fellow), California Institute of Technology (Caltech), Department of Computer Science, 2003–2006
- Motoya Machida, Department of Mathematical Sciences
  - Dissertation: Stochastic monotonicity and realizable monotonicity
  - Ph.D. awarded in May, 1999
  - Postdoctoral Fellow, Utah State University, Department of Mathematics, 2000-2002
  - Assistant Professor, Tennessee Technological University, Department of Mathematics, 2002– (tenured in 2005)
- Clyde Henry Schoolfield, Jr., Department of Mathematical Sciences
  - Dissertation: Random walks on wreath products of groups and Markov chains on related homogeneous spaces
  - All requirements for Ph.D. completed in May, 1998; degree conferred in May, 1999
  - Selected for participation in Probability Intern Program at the Center for the Mathematical Sciences at the University of Wisconsin–Madison in summer, 1998
  - Visiting Assistant Professor, Duke University, Department of Mathematics, 1998–1999
  - Visiting Assistant Professor, Harvard University, Department of Statistics, 1999–2001
  - Assistant Professor (tenure track), University of Florida, Department of Statistics, 2001–
- Robert P. Dobrow, Department of Mathematical Sciences
  - Dissertation: Markov chain analysis of some self-organizing schemes for lists and trees
  - Ph.D. awarded in May, 1994
  - Awarded two-year National Research Council/National Institute of Standards and Technology Postdoctoral Research Associateship, beginning June, 1994
  - Promoted to Associate Professor (with tenure), Carleton College (Minnesota), beginning Fall, 2005
- Ursula Prod, Department of Mathematics
  - Dissertation: The cut-off phenomenon for random reflections
  - Ph.D. awarded in December, 1993
  - Sole national winner in field of probability and statistics in competition for two-year postdoctoral fellowship at Miller Institute for Basic Research in Science at University of California, Berkeley; began fellowship in August, 1994 under direction of Professor David Aldous
  - Also selected for participation in Probability Intern Program at the Center for the Mathematical Sciences at the University of Wisconsin–Madison in summer, 1994 and in summer, 1995

## Addresses

- Invited lecture series, and other invited or special addresses
  - **Future:** *Invited Short Course (6 hours of lectures):* ANALCO (Workshop on Analytic Algorithms and Combinatorics) Winter School, New Orleans, Louisiana, January, 2013
  - **Future:** Workshop on Performance Analysis of Monte Carlo Methods, Institute for Computational and Experimental Research in Mathematics (ICERM), Brown University, November, 2012 (Invited Address)
  - Institute of Applied Mathematics, Chinese Academy of Sciences, Beijing, China, July, 2012 (two Invited Addresses)
  - Eighth Workshop on Markov Processes and Related Topics, Beijing Normal University, Beijing, China, July, 2012 (Invited Address)
  - 23rd International Meeting on Probabilistic, Combinatorial, and Asymptotic Methods in the Analysis of Algorithms (AofA 2012), Centre de recherches mathématiques (CRM), Montreal, Quebec, Canada, June, 2012 (two Invited Addresses)
  - *Invited Short Course (6 hours of lectures):* ANALCO (Workshop on Analytic Algorithms and Combinatorics) Winter School, Kyoto, Japan, January, 2012 (postponed one year due to unavailability of venue)
  - 22nd International Meeting on Probabilistic, Combinatorial, and Asymptotic Methods in the Analysis of Algorithms (AofA 2011), Będlewo, Poland, June, 2011 (Plenary Address)
  - Applied Stochastic Models and Data Analysis (ASMDA2011), Special Session on “Sequential Selections and Hitting Times”, Rome, Italy, June, 2011 (Invited Address)
  - Workshop on Analytic Algorithms and Combinatorics (ANALCO11), San Francisco, California, January, 2011
  - 21st International Meeting on Probabilistic, Combinatorial, and Asymptotic Methods in the Analysis of Algorithms (AofA 2010), Vienna, Austria, June–July, 2010 (Invited Address)
  - Joint Mathematics Meetings, AMS Special Session on “Markov Chains and Their Statistical Applications”, San Francisco, California, January, 2010 (Invited Address)
  - 20th International Meeting on Probabilistic, Combinatorial, and Asymptotic Methods in the Analysis of Algorithms (AofA 2009), Fréjus, France, June, 2009 (Invited Address)
  - 25th Nordic and 1st British-Nordic Congress of Mathematicians, session on Discrete Probability, Oslo, Norway, June, 2009 (Invited Address)
  - Mittag-Leffler Institute, Djursholm, Sweden, May, 2009 (Invited Address)
  - *Invited Short Course (one week, 10 hours of lectures):* Summer School in Applied Probability, Carleton University, Ottawa, Ontario, Canada, May, 2009
  - World Congress in Probability and Statistics (WCPS08), session on Probabilistic Analysis of Algorithms, Singapore, July, 2008 (Invited Address)
  - 2008 International Workshop on Applied Probability, University of Technology of Compiègne, France, July, 2008 (Invited Address)
  - Conference on Analysis and Probability, University of Nice Sophia Antipolis, France, June, 2008 (Invited Address)
  - 2008 Conference on Analysis of Algorithms (AofA 2008), Maresias, Brazil, April, 2008 (Invited Address)



- Workshop on Markov-Chain Monte Carlo Methods, Newton Institute, Cambridge, England, March, 2008 (Invited Address)
- Workshop on Analytic Algorithms and Combinatorics (ANALCO08), San Francisco, California, January, 2008
- Applied Probability Day, Columbia University, June, 2007 (Invited Address)
- Third Workshop on Monte Carlo Methods, Harvard University, May, 2007 (Invited Address)
- *Invited Short Course (three lectures)*: School “Information and Randomness 2006”, Santiago, Chile, December, 2006
- Conference to Celebrate 65th Birthdays of Steve Stigler and Mike Wichura, University of Chicago, Statistics, November, 2006 (Invited Address)
- Analysis of Algorithms 2006 (AofA 2006), Bilzen, Belgium, July, 2006 (Invited Address)
- Applied Probability Workshop, Carleton University, Ottawa, Ontario, Canada, June, 2006 (Invited Address)
- Winter Workshop on “Frontiers of Theoretical Statistics”, University of Florida, January, 2006 (Invited Address)
- *Plenary Address*: Small Deviation Probabilities and Related Topics (second international conference), St. Petersburg, Russia, September, 2005
- 2005 International Conference on the Analysis of Algorithms, Barcelona, Spain, June, 2005
- Workshop on Markov Chains in Algorithms and Statistical Physics, Mathematical Sciences Research Institute, Berkeley, California, January–February, 2005 (Invited Address)
- Workshop on Sharp Thresholds for Mixing Times, American Institute of Mathematics, Palo Alto, California, December, 2004 (Invited Participant and Invited Address)
- Seventh Iranian Statistical Conference, Allameh Tabatabayie University, Tehran, Iran, August, 2004 (Invited Address)
- Oberwolfach Mini-Workshop on Probability Theory on Trees and Analysis of Algorithms, Oberwolfach, Germany, August, 2004 (three Invited Addresses)
- Eighth Brazilian School of Probability (Escola Brasileira de Probabilidade), Ubatuba, São Paulo, Brazil, August, 2004 (Invited Address)
- *Plenary Address*: Tenth Seminar on Analysis of Algorithms, Mathematical Sciences Research Institute, Berkeley, California, June, 2004
- Meeting on Markov Chains and Random Algorithms, Cornell University, May, 2004 (Invited Address)
- ACM–SIAM Symposium on Discrete Algorithms (SODA04), New Orleans, Louisiana, January, 2004
- East-Asian and Pacific Regional Meeting of the Bernoulli Society, session on Probabilistic Analysis of Algorithms, Kowloon, Hong Kong, December, 2003 (Invited Address)
- First Northeastern Probability Seminar, CUNY Graduate Center, New York, New York, November, 2003 (Invited Address)
- Research Symposium on Markov Chains: Algorithms, Applications and Theory, University of Durham, England, July–August, 2003 (Invited Address)
- Ninth Seminar on Analysis of Algorithms, San Miniato, Italy, June, 2003 (Invited Address)

- Joint Mathematics Meetings, Special Session on “Discrete Models”, Baltimore, Maryland, January, 2003 (Invited Address)
- Program on Stochastic Computation, Statistical and Applied Mathematical Sciences Institute, Research Triangle Park, North Carolina, September–October, 2002 (Invited Address)
- Workshop on Randomised Algorithms, Newton Institute, Cambridge, England, August, 2002 (Invited Address)
- IMS 65th Annual Meeting, Banff, Alberta, Canada, July, 2002 (Invited Address)
- Eighth Seminar on the Mathematical Analysis of Algorithms, Strobl (near Salzburg), Austria, June, 2002 (Invited Address)
- *Plenary Address*: EURANDOM Workshop on Discrete Probability, Eindhoven, The Netherlands, June, 2002
- *Invited Lecture Series (one week)*, joint with Laurent Saloff-Coste: Graduate Course on Finite Markov Chains, Oberwolfach, Germany, May, 2002
- 2002 AMS and MAA Spring Southeastern Section Meeting, Special Session on “Probability and Combinatorics”, Atlanta, Georgia, March, 2002 (Invited Address)
- *Plenary Address*: International Workshop on Applied Probability, Caracas, Venezuela, January, 2002
- Stochastics Meeting Lunteren 2001, Lunteren, The Netherlands, November, 2001 (series of two Invited Addresses)
- Third Northwest Probability Seminar, Seattle, Washington, October, 2001 (Invited Address)
- Oberwolfach Meeting on Combinatorics, Probability and Computing, Oberwolfach, Germany, September, 2001 (Invited Address)
- IMS 64th Annual Meeting, Atlanta, Georgia, August, 2001 (Invited Address)
- Seventh Seminar on the Mathematical Analysis of Algorithms, Tatihou Island (in Normandy), France, July, 2001 (Invited Address)
- *Invited “Minicourse” (three lectures)*: Workshop on Topics in Finite Markov Chains, Rome, Italy, December, 2000
- Colloquium on Mathematics and Computer Science: Algorithms, Trees, Combinatorics and Probabilities, Versailles, France, September, 2000 (Invited Address)
- Sixth Seminar on the Mathematical Analysis of Algorithms, Krynica Morska (near Gdansk), Poland, July, 2000 (Invited Address)
- *Keynote Address*: 26th Annual Graduate Mathematics Conference, Syracuse University, April, 2000
- IMS Probability Workshop on Markov Chain Monte Carlo: Advances in Theory and Applications, Baltimore, Maryland, August, 1999 (Invited Address)
- *Plenary Address*: Ninth International Conference on Random Structures and Algorithms, Poznań, Poland, August, 1999
- Fifth International Seminar on the Mathematical Analysis of Algorithms, Barcelona, Spain, June, 1999 (Invited Address)
- Workshop on Monte Carlo Methods, Fields Institute, Toronto, Ontario, Canada, October, 1998 (Invited Address)
- The 1998 Institute for Elementary Studies (IES), Door County, Ellison Bay, Wisconsin (Invited Participant and Invited Address), August, 1998
- Warwick Randomised Algorithms and Stochastic Simulation (WRASS) Workshop, University of Warwick, England, July, 1998 (Invited Address)

- DIMACS-sponsored The Fourth International Seminar on “Average-Case” Analysis of Algorithms, Princeton, New Jersey, July, 1998 (Invited Address)
- *Invited Lecture Series (four lectures)*: Probability Intern Program, Center for the Mathematical Sciences, University of Wisconsin–Madison, July, 1998
- Workshop on Exact Simulation, Rebild, Denmark, November–December, 1997 (Invited Address)
- Oberwolfach Meeting on Random Graphs and Combinatorial Structures, Oberwolfach, Germany, September–October, 1997 (Invited Address)
- The Third International Symposium on Probability and its Applications, Park City, Utah, July–August, 1997 (Invited Address)
- The Third Dagstuhl Meeting on “Average-Case” Analysis of Algorithms, Dagstuhl, Germany, July, 1997 (Invited Address)
- DIMACS Workshop on Microsurveys in Discrete Probability, Princeton, New Jersey, June, 1997 (Invited Address)
- 29th Annual ACM Symposium on the Theory of Computing, El Paso, Texas, May, 1997
- Mid-Atlantic Day for Combinatorics and Probability, Baltimore, Maryland, November, 1996 (Invited Address)
- Joint Statistical Meetings, Chicago, Illinois, August, 1996 (Invited Address)
- The Johns Hopkins University, Inaugural Professorial Lecture, March, 1996 (University-wide Address)
- 8th INFORMS Applied Probability Group Conference, Atlanta, Georgia, June, 1995 (Invited Address)
- Mittag-Leffler Institute, Djursholm, Sweden, May, 1995 (Invited Address)
- IMS 57th Annual Meeting, Chapel Hill, North Carolina, June, 1994 (Invited Address)
- Workshop: Finite Markov Chains Renaissance, Institute for Mathematics and Applications, Minneapolis, Minnesota, October, 1993 (Invited Address)
- IMS Directions in Probability Workshop on Monte Carlo Markov Chains, Stanford, California, August, 1993 (Invited Address)
- ICMS Workshop on Randomness and Computation, Edinburgh, Scotland, July, 1993 (Invited Address)
- Clifford Lectures, Tulane University, March–April, 1993 (Invited Address)
- ORSA/TIMS Joint National Meeting, San Francisco, California, November, 1992 (Invited Address)
- Mid-Atlantic Regional Probability and Statistics Day, Laurel, Maryland, October, 1992 (Special Invited Address)
- DIMACS Workshop on Expander Graphs, Princeton, New Jersey, May, 1992 (Invited Address)
- AMS Special Session on Probability on Algebraic and Topological Structures, Tampa, Florida, March, 1991 (Invited Address)
- Mid-Atlantic Regional Probability and Statistics Day, Washington, D.C., October, 1990 (Special Invited Address)
- IMS Western Regional Meeting, Victoria, British Columbia, Canada, June, 1981 (Invited Address)

- Other addresses, including department seminar talks
  - **Future:** Columbia University, spring, 2013
  - **Future:** University of Pennsylvania, Statistics, fall, 2012
  - **Future:** Duke University, Mathematics, fall, 2012
  - George Washington University, Statistics, April, 2011
  - American University, Mathematics and Statistics, December, 2009
  - University of Pennsylvania, Mathematics, November, 2008
  - University of Maryland, Baltimore County, Mathematics and Statistics, September, 2004
  - University of Delaware, Mathematical Sciences, May, 2004
  - University of Pennsylvania, Mathematics, February, 2004
  - University of Rochester, Mathematics, February, 2004
  - University of Chicago, Statistics, April, 2002
  - Microsoft Research, Theory Group, Redmond, Washington, October, 2001
  - Ohio State University, Mathematics, March, 2001
  - Microsoft Research, Theory Group, Redmond, Washington, February, 2001
  - University of Washington, Mathematics, February, 2001
  - New York University, Courant Institute of Mathematical Sciences, February, 2001
  - George Washington University, Statistics, September, 2000
  - Georgia Institute of Technology, Algorithms, Combinatorics, and Optimization, February, 2000
  - Georgia Institute of Technology, Mathematics, February, 2000
  - University of Maryland, Baltimore County, Mathematics and Statistics, February, 2000
  - Albert Ludwigs University of Freiburg (Germany), Institute for Mathematical Stochastics, January, 2000
  - Christian Albrechts University of Kiel (Germany), Mathematics, January, 2000
  - IMS 58th Annual Meeting, Montreal, Quebec, Canada, July, 1995
  - New York University, Courant Institute of Mathematical Sciences, April, 1995
  - National Institute of Standards and Technology, Computing and Applied Mathematics Laboratory, Statistical Engineering Division, March, 1995
  - American Society for Quality Control, Maryland Section, December, 1993
  - Rutgers University, Statistics, October, 1993
  - Northwestern University, Statistics, January, 1993
  - University of Chicago, Statistics, January, 1993
  - Applied Physics Laboratory of The Johns Hopkins University, Laurel, Maryland, October, 1992
  - Boston University, Mathematics, October, 1991
  - Tufts University, Mathematics, October, 1991
  - Massachusetts Institute of Technology, Mathematics, October, 1991
  - Supercomputing Research Center, Bowie, Maryland, May, 1991
  - American Statistical Association, Delaware Chapter, May, 1991
  - Carnegie Mellon University, Statistics, May, 1991

- University of Pennsylvania, Statistics, April, 1991
- Yale University, Statistics, March, 1991
- IMS 53rd Annual Meeting, Uppsala, Sweden, August, 1990
- Stanford University, Statistics, July, 1990
- IMS Eastern Regional Meeting, Baltimore, Maryland, April, 1990
- Joint Statistical Meetings, Washington, D.C., August, 1989
- Stanford University, Statistics, August, 1989
- Harvard University, Statistics, May, 1989
- University of Maryland, Baltimore County, Mathematics and Statistics, April, 1989
- Mid-Atlantic Regional Probability and Statistics Day, Laurel, Maryland, October, 1988
- University of Maryland, Mathematics, October, 1988
- IMS Symposium on Probability and its Applications, Fort Collins, Colorado, August, 1988
- Harvard University, Mathematics, May, 1988
- University of Michigan, Statistics, March, 1988
- The Johns Hopkins University, Mathematical Sciences, March, 1988
- University of California at Berkeley, Statistics, October, 1987
- 16th Conference on Stochastic Processes and Their Applications, Stanford University, August, 1987
- Joint Statistical Meetings, San Francisco, California, August, 1987
- Northwestern University, Statistics, March, 1987
- Purdue University, Statistics, February, 1987
- University of Chicago, Statistics, November, 1986
- Joint Statistical Meetings, Cincinnati, Ohio, August, 1982
- University of California at Berkeley, Statistics, Joint Colloquium with Stanford University, Statistics, April, 1982

## Courses Taught

- Ph.D. Level Courses
  - Probability and Stochastic Processes Seminar
  - Probability Theory
  - Advanced Probability
  - Topics in Probability: Markov Chains
  - Topics in Probability: Markov Chain Monte Carlo
  - Topics in Probability: Reversible Markov Chains
  - Topics in Probability: Random Walk
  - Topics in Probability: Convergence to Stationarity for Markov Processes
  - Topics in Probability: Boundary Crossing Probabilities
  - Stochastic Processes
  - Advanced Stochastic Processes
  - Theoretical Statistics
  - Matrix Analysis and Linear Algebra

- Matrix Analysis Seminar
- Masters Level Courses
  - Nonparametric Statistics
  - Stochastic Processes
- Undergraduate Courses
  - Probability
  - Stochastic Processes
  - Statistics
  - Chance and Strategy (probability, statistics, game theory)

**Committee and Other Service at Johns Hopkins, Department of Applied Mathematics and Statistics (University/School of Engineering committee where noted)**

- Faculty Search and Promotion, 1995–2013
- Acheson J. Duncan Fund, 1996–2013
- Undergraduate Studies, Director, 2010–2013
- Distinguished Awards Committee, 2011–13
- External Mentor to Assistant Professor Vladimir Braverman (School of Engineering), 2012–2013
- Homewood Grievance Committee (University), 2011–2012
- Student Life Constituent Committee (University), 2012
- Nine ad hoc promotion and/or tenure committees, four as Chair (University and School of Engineering), 1995–2011
- Introductory Exam Committee, 2005; Chair, 2004, 2010–2011
- Distinguished Awards Committee (School of Engineering), 2011
- Three ad hoc (full) professor appointment committees (University and School of Engineering), 2000–2010
- Communications (including organization of seminars), 2004–2005; Chair, 1998–2000, 2002–2004, 2005–2008, 2009
- Curriculum Committee (School of Engineering), 2007–2008
- Homewood Safety and Security (University), 2005–2008
- Marshal for all Undergraduate Degrees in Engineering (University), University Commencement Ceremony, 2007
- Department Faculty Solicitor, United Way Campaign (School of Engineering), 1999–2000, 2003–2007
- Qualifying Examinations Restructuring, Chair, 2004
- Middle States Commission of Higher Education Accreditation (School of Engineering), 2003–2004

- Ph.D. Qualifying Exams, Subchair, 1989, 1995–1997, 2002–2004
- Steering Committee of the Faculty Assembly (University), 1999–2002; Secretary, 1999–2000; Chair, 2000–2001; position vacated due to sabbatical, 2001–2002
- Academic Affairs (including graduate admissions and financial aid), Chair, 2000–2001
- Marshal for Society of Scholars, Deans, Officers of the University, and Trustees, University Commencement Ceremony (University), 1999
- Seminars and Social Events, Chair, 1993–1998
- Safety, 1994–1998
- Probability and Statistics Course Advisory Committee, 1996–1998
- Probability and Statistics Curriculum, 1994–1995
- Undergraduate Programs, 1992–1994; Chair in Spring, 1993
- Graduate Admissions and Financial Aid, 1988–1993
- Seminars, Chair, 1989–1991
- Social Events, 1988–1989, 1990–1991
- Graduate Student Programs and Review, 1988–1989

### Committee Service at Stanford, Department of Statistics

- University Freshman Advisor, 2 years
- Ph.D. Qualifying Exams, 5 years, chair 1 year
- Curriculum, 2 years
- M.S. Advising and Recruiting, 2 years, chair 1 year
- Ph.D. Admissions and Awards, 1 year
- Seminars, chair 1 year
- Computing, 1 year

### Research Publications

1. Invariance properties of Schoenberg's tone-row system (with Alan J. Izenman). *Journal of the Australian Mathematical Society Series B*, **21** (1980), 268–282.
2. The structure of RI-invariant twelve-tone rows (with Alan J. Izenman). *Journal of the Australian Mathematical Society Series B*, **21** (1980), 402–417.
3. Convergence rates related to the strong law of large numbers. *Annals of Probability*, **11** (1983), 123–142.
4. On projection pursuit measures of multivariate location and dispersion (with Iain Johnstone). *Annals of Statistics*, **12** (1984), 127–141.
5. Bounds on the coarseness of random sums. *Annals of Probability*, **16** (1988), 1644–1664.
6. The Radon transform on  $\mathbf{Z}_n$ . *SIAM Journal on Discrete Mathematics*, **2** (1989), 262–283.
7. The convergence rate for the strong law of large numbers: general lattice distributions (with Michael Wichura). *Probability Theory and Related Fields*, **81** (1989), 189–212.

8. Asymptotic expansions for large deviation probabilities in the strong law of large numbers. *Probability Theory and Related Fields*, **81** (1989), 213–233.
9. Strong stationary times via a new form of duality (with Persi Diaconis). *Annals of Probability*, **18** (1990), 1483–1522.
10. Examples for the theory of strong stationary duality with countable state spaces (with Persi Diaconis). *Probability in the Engineering and Informational Sciences*, **4** (1990), 157–180.
11. Eigenvalue bounds on convergence to stationarity for nonreversible Markov chains, with an application to the exclusion process. *Annals of Applied Probability*, **1** (1991), 62–87.
12. Time to stationarity for a continuous-time Markov chain. *Probability in the Engineering and Informational Sciences*, **5** (1991), 61–76.
13. Strong stationary duality for continuous-time Markov chains; Part I: theory. *Journal of Theoretical Probability*, **5** (1992), 45–70.
14. Analysis of top to random shuffles (with Persi Diaconis and Jim Pitman). *Combinatorics, Probability & Computing*, **1** (1992), 135–155.
15. Percolation, first-passage percolation, and covering times for Richardson’s model on the  $n$ -cube (with Robin Pemantle). *Annals of Applied Probability*, **3** (1993), 593–629.
16. An exact formula for the move-to-front rule for self-organizing lists. *Journal of Theoretical Probability*, **9** (1996), 113–160.
17. On the Markov chain for the move-to-root rule for binary search trees (with Robert P. Dobrow). *Annals of Applied Probability*, **5** (1995), 1–19.
18. Rates of convergence for the move-to-root Markov chain for binary search trees (with Robert P. Dobrow). *Annals of Applied Probability*, **5** (1995), 20–36.
19. The move-to-front rule for self-organizing lists with Markov dependent requests (with Robert P. Dobrow). Refereed article, pages 57–80 in *Discrete Probability and Algorithms* (eds.: D. Aldous, P. Diaconis, J. Spencer, and J. M. Steele), *IMA Volumes in Mathematics and its Applications*, **72**, Springer–Verlag, 1995.
20. On the distribution of binary search trees under the random permutation model. *Random Structures and Algorithms*, **8** (1996), 1–25.
21. On the distribution of search cost for the move-to-front rule (with Lars Holst). *Random Structures and Algorithms*, **8** (1996), 179–186.
22. Limits and rates of convergence for the distribution of search cost under the move-to-front rule. *Theoretical Computer Science*, **164** (1996), 185–206.
23. Multiway trees of maximum and minimum probability under the random permutation model (with Robert P. Dobrow). *Combinatorics, Probability & Computing*, **5** (1996), 351–371.
24. The number of  $m$ -ary search trees on  $n$  keys (with Robert P. Dobrow). *Combinatorics, Probability & Computing*, **6** (1997), 435–453.
25. On the distribution for the duration of a randomized leader election algorithm (with Hosam Mahmoud and Wojciech Szpankowski). *Annals of Applied Probability*, **6** (1996), 1260–1283.



26. Wall and Siegmund duality relations for birth and death chains with reflecting barrier (with Holger Dette, Jim Pitman, and William J. Studden). Article invited to special issue in honor of 70th birthday of Murray Rosenblatt, *Journal of Theoretical Probability*, **10** (1997), 349–374.
27. An interruptible algorithm for perfect sampling via Markov chains.
  - Refereed extended abstract: pages 688–695 in *Proceedings of the Twenty-Ninth Annual ACM Symposium on the Theory of Computing*, 1997.
  - Full paper: *Annals of Applied Probability*, **8** (1998), 131–162.
28. The move-to-front rule: a case study for two perfect sampling algorithms. *Probability in the Engineering and Informational Sciences*, **12** (1998), 283–302.
29. The Moore–Penrose generalized inverse for sums of matrices (with Donniell E. Fishkind). *SIAM Journal on Matrix Analysis and Applications*, **21** (1999), 629–635.
30. Affine isomorphism for partially ordered sets (with Donniell E. Fishkind and Edward R. Scheinerman). *Order*, **15** (1999), 183–193.
31. Total path length for random recursive trees (with Robert P. Dobrow). *Combinatorics, Probability & Computing*, **8** (1999), 317–333.
32. Random intersection graphs when  $m = \omega(n)$ : an equivalence theorem relating the evolution of the  $G(n, m, p)$  and  $G(n, p)$  models (with Edward R. Scheinerman and Karen Singer-Cohen). *Random Structures and Algorithms*, **16** (2000), 156–176.
33. Stochastic monotonicity and realizable monotonicity (with Motoya Machida). *Annals of Probability*, **29** (2001), 938–978.
34. Extension of Fill’s perfect rejection sampling algorithm to general chains (with Motoya Machida, Duncan J. Murdoch, and Jeffrey S. Rosenthal).
  - Refereed extended abstract: pages 37–52 in *Monte Carlo Methods* (ed.: N. Madras), *Fields Institute Communications* **26**, American Mathematical Society, 2000.
  - Full paper: *Random Structures and Algorithms*, **17** (2000), 290–316.
35. Smoothness and decay properties of the limiting Quicksort density function (with Svante Janson). Refereed article, pages 53–64 in *Mathematics and Computer Science: Algorithms, Trees, Combinatorics and Probabilities* (eds.: D. Gardy and A. Mokkadem), a volume in the series *Trends in Mathematics*, Birkhäuser Verlag, 2000.
36. A characterization of the set of fixed points of the Quicksort transformation (with Svante Janson). *Electronic Communications in Probability*, **5** (2000), 77–84 (electronic).
37. Perfect simulation from the Quicksort limit distribution (with Luc Devroye and Ralph Neininger). *Electronic Communications in Probability*, **5** (2000), 95–99 (electronic).
38. Mixing times for Markov chains on wreath products and related homogeneous spaces (with Clyde H. Schoolfield, Jr.). *Electronic Journal of Probability*, **6** (2001), Paper No. 11, 1–22 (electronic).
39. Randomness Recycler (with Mark Lawrence Huber):
  - Short paper, with title “The Randomness Recycler approach to perfect sampling”: presented at the Invited Papers Meeting on Perfect Simulation, 53rd Session of the International Statistical Institute, Seoul, Korea, in August, 2001.
  - Refereed extended abstract, with title “The Randomness Recycler: a new technique for perfect sampling”: pages 503–511 in *Proceedings of the 41st Annual Symposium on Foundations of Computer Science*, 2000.

40. Realizable monotonicity and inverse probability transform (with Motoya Machida). Refereed article, pages 63–72 in *Proceedings of Distributions with Given Marginals and Statistical Modelling* (eds.: C. M. Cuadras, J. Fortiana, and J. Rodríguez-Lallena), Kluwer Academic Publishers, 2002.
41. Approximating the limiting Quicksort distribution (with Svante Janson). Special Analysis of Algorithms issue of *Random Structures and Algorithms*, **19** (2001), 376–406.
42. Quicksort asymptotics (with Svante Janson). Special Analysis of Algorithms issue of *Journal of Algorithms*, **44** (2002), 4–28.
43. Interruptible exact sampling in the passive case (with Keith Crank). Special International Workshop on Applied Probability issue of *Methodology and Computing in Applied Probability*, **4** (2002), 359–376.
44. Speeding up the FM MR perfect sampling algorithm: A case study revisited (with Robert P. Dobrow). *Random Structures and Algorithms*, **23** (2003), 434–452.
45. Transfer theorems and asymptotic distributional results for  $m$ -ary search trees (with Nevin Kapur). *Random Structures and Algorithms*, **26** (2005), 359–391.
46. Singularity analysis, Hadamard products, and tree recurrences (with Philippe Flajolet and Nevin Kapur). *Journal of Computational and Applied Mathematics*, (2004), **174/2**, 271–313.
47. Limiting distributions for additive functionals on Catalan trees (with Nevin Kapur). *Theoretical Computer Science*, (2004), **326**, 69–102.
48. Asymptotic analysis via Mellin transforms for small deviations in  $L^2$ -norm of integrated Brownian motion (with Fred Torcaso). *Probability Theory and Related Fields*, (2004), **130**, 259–288.
49. Exact expectations of minimal spanning trees for graphs with random edge weights (with J. Michael Steele). Refereed article, pages 169–180 in *Stein’s Method and Applications* (eds.: A. D. Barbour and Louis H. Y. Chen), *Lecture Notes Series, Institute for Mathematical Sciences, National University of Singapore*, **5**, World Scientific, 2005.
50. The space requirement of  $m$ -ary search trees: Distributional asymptotics for  $m \geq 27$  (with Nevin Kapur). Invited paper appearing (page numbers unknown) in *Proceedings of the 7th Iranian Statistical Conference*, 2004.
51. Destruction of very simple trees (with Nevin Kapur and Alois Panholzer). Special Analysis of Algorithms issue of *Algorithmica*, **46** (2007), 345–366.
52. A repertoire for additive functionals of uniformly distributed  $m$ -ary search trees (with Nevin Kapur).
  - Refereed extended abstract: pages 105–114 in *2005 International Conference on the Analysis of Algorithms* (ed.: Conrado Martínez), *Discrete Mathematics and Theoretical Computer Science Proceedings*, **AD**, 2005.
  - Full paper: Submitted in February, 2008 to *Random Structures and Algorithms*; publication decision deferred in October, 2008 pending revision.
53. Two-player Knock ’em Down (with David B. Wilson). *Electronic Journal of Probability*, **13** (2008), Paper No. 9, 198–212 (electronic).
54. Precise logarithmic asymptotics for the right tails of some limit random variables for random trees (with Svante Janson). Special Analysis of Algorithms issue of *Annals of Combinatorics* **12** (2008), 399–412.

55. The passage time distribution for a birth-and-death chain: Strong stationary duality gives a first stochastic proof. *Journal of Theoretical Probability*, **22** (2009), 543–557. (See special note accompanying next publication in this list.)
56. On hitting times and fastest strong stationary times for skip-free chains. *Journal of Theoretical Probability*, **22** (2009), 587–600.
- (Special note: As Editor-in-Chief of *Journal of Theoretical Probability*, the author had nothing to do with the handling of this paper and the one preceding it in this list other than to ask former Editor-in-Chief Arunava Mukherjea to act as Editor-in-Chief for those submissions. The papers were submitted to *Journal of Theoretical Probability* in order to form a natural three-paper sequence with a paper submitted to the same journal by Persi Diaconis and Laurent Miclo.)
57. Analysis of the expected number of bit comparisons required by Quickselect (with Takehiko Nakama).
- Refereed extended abstract: *Joint Proceedings of the Workshop on Algorithm Engineering and Experiments (ALENEX) and the Workshop on Analytic Algorithmics and Combinatorics (ANALCO)* (2008), 249–256.
  - Full paper: *Algorithmica*, **15** (2010), 730–769.
58. The number of symbol comparisons in Quicksort and Quickselect (with Brigitte Vallée, Julien Clément, and Philippe Flajolet). Refereed extended abstract, pages 750–763 in *36th International Colloquium on Automata, Languages and Programming (ICALP 2009)*, Part I, LNCS 5555 (eds.: S. Albers et al.), Springer–Verlag, 2009.
59. Perfect simulation of Vervaat perpetuities (with Mark Lawrence Huber). *Electronic Journal of Probability*, **15** (2010), Paper No. 4, 96–109 (electronic).
60. On vertex, edge, and vertex-edge random graphs (with Elizabeth Beer, Svante Janson, and Edward R. Scheinerman).
- Refereed extended abstract: *Joint Proceedings of the Workshop on Algorithm Engineering and Experiments (ALENEX) and the Workshop on Analytic Algorithmics and Combinatorics (ANALCO)* (2011), 16–22.
  - Full paper: *Electronic Journal of Combinatorics*, **18** (2011), Paper P110, electronic.
61. Comparison inequalities and fastest-mixing Markov chains (with Jonas Kahn). *Annals of Applied Probability*, to appear (2012).
62. Hitting times and interlacing eigenvalues: a stochastic approach using intertwining (with Vince Lyzinski). *Journal of Theoretical Probability*, to appear (2012).
63. Exact  $L^2$ -distance from the limit for QuickSort key comparisons (with Patrick Bindjeme).
- Refereed extended abstract: pages 339–348 in *23rd International Meeting on Probabilistic, Combinatorial, and Asymptotic Methods for the Analysis of Algorithms (AofA'12)* (eds.: Nicolas Broutin and Luc Devroye), *DMTCS Proceedings*, 2012.
  - Full paper: in preparation.
64. The limiting distribution for the number of symbol comparisons used by QuickSort is nondegenerate (with Patrick Bindjeme).
- Refereed extended abstract: pages 349–360 in *23rd International Meeting on Probabilistic, Combinatorial, and Asymptotic Methods for the Analysis of Algorithms (AofA'12)* (eds.: Nicolas Broutin and Luc Devroye), *DMTCS Proceedings*, 2012.
  - Full paper: in preparation.

65. The number of bit comparisons used by Quicksort: an average-case analysis (with Svante Janson).
  - Refereed extended abstract: pages 293–300 in *Proceedings of the ACM–SIAM Symposium on Discrete Algorithms* (SODA04), 2004.
  - Full paper: *Electronic Journal of Probability*, **17** (2012), Article 43, 1–22 (electronic).
66. Distributional convergence for the number of symbol comparisons used by QuickSelect (with Takehiko Nakama). *Advances in Applied Probability*, to appear (2012).
67. Distributional convergence for the number of symbol comparisons used by QuickSort.
  - Extended abstract: Refereed article, pages 221–234 in *Proceedings of the 21st International Meeting on Probabilistic, Combinatorial and Asymptotic Methods for the Analysis of Algorithms* (eds.: M. Drmota and B. Gittenberger), 2010.
  - Full paper: *Annals of Applied Probability*, to appear (2012).
68. Partitions with distinct multiplicities of parts: On an “unsolved problem” posed by Herbert Wilf (with Svante Janson and Mark Daniel Ward). *Electronic Journal of Combinatorics*, **19** (2012), Paper P18, electronic.
69. The Randomness Recycler: a new approach to perfect simulation (draft, with Mark Lawrence Huber).
70. Use of neutral colors with the Randomness Recycler for perfect simulation (draft, with Mark Lawrence Huber).
71. (Several other publications—including the book *Reversible Markov Chains and Random Walks on Graphs* with David Aldous—are in preparation.)

## Other Publication

- Solutions Manual to *Combinatorial Algorithms: Theory and Practice* (with Edward M. Reingold). Englewood Cliffs, N.J.: Prentice Hall, 1977.

November 13, 2012