CURRICULUM VITAE

GENNADY SAMORODNITSKY

Date of birth:		September 12, 1957
Citizenship:		U.S.A.
Address	HOME:	126 West Lexington Drive Ithaca, NY 14850 (607) 257-1085
	OFFICE:	School of Operations Research and Industrial Engineering Cornell University Ithaca, NY 14853 (607) 255-9141
Marital Status:		Married, sons Eric (1984) and Daniel (1988), daughter Sarah-Nathalie (1996)

Academic Degrees

B.Sc. (in Computer Science)	Moscow Steel and Alloys Institute, 1978
M.Sc. (in Operations Research)	Technion - Israel Institute of Technology, 1983
D.Sc. (in Statistics)	Technion - Israel Institute of Technology, 1986

Academic and Professional Appointments

9/80 - 6/86	Graduate Student/Teaching Assistant Technion - Israel Institute of Technology
7/86 - 8/87	Post-Doctoral Fellow Center for Stochastic Processes University of North Carolina at Chapel Hill
9/87 - 8/88	Visiting Assistant Professor Department of Mathematics Boston University

8/88 - 6/94 Assistant Professor
School of Operations Research & Industrial Engineering
Cornell University

7/94 - 6/00 Associate Professor, with tenure
School of Operations Research & Industrial Engineering
Cornell University

7/00 - present Full Professor, with tenure
School of Operations Research & Industrial Engineering
Cornell University

Visiting Appointments

8/94 Visiting Scholar
Department of Mathematics
Chalmers Technological University

9/94 - 5/95 Visiting Scholar
Forschungsinstitut für Mathematik & Institut für Operations Research
ETH Zürich

6/95 Visiting Scholar
Department of Mathematics
Chalmers Technological University

1/03 Member
Mathematical Sciences Research Institute
Berkeley

Teaching Experience

(1) *Undergraduate Courses*:

(a) Sampling Design
(b) Discrete Event Simulation
(c) Stochastic Processes for Engineers
(d) Introduction to Probability
(e) Advanced Stochastic Processes for Engineers
(f) Applied Time Series
(g) Probability and Statistics for Engineers II

(2) *Graduate Courses*:

(a) Introduction to Stable Processes
(b) Probability
(c) Sample Path Properties of Stochastic Processes

(d) Applied Stochastic Processes
(e) Advanced Applied Stochastic Processes
(f) Long Range Dependence
(g) Statistical Principles
(h) Palm Calculus and Queues
(i) Time Series Analysis
(j) Weak Convergence

Special Invited Courses

1. Advanced Concentrated Course on Long Range Dependence, Heavy Tails and Rare Events with Applications to Finance and Telecommunications. A 16-hour course, May 6, 2002 - May 10, 2002, University of Copenhagen. Organized by MaPhySto, Centre for Mathematical Physics and Stochastics.

Prizes and Awards

1986 Chaim Weizmann Fellowship
1987 Chaim Weizmann Fellowship
2000 S. Yau ′72 Teaching Award
2000 Fellowship in the Institute of Mathematical Statistics

Presently Running Grants

Topics and Heavy Tailed Modeling (with S. Resnick). NSF.

Advanced Topics in Analysis of Stochastic Models with Heavy Tails and/or Long Range Deependence (with S. Resnick). NSA.

Professional Activities

Member of the Institute of Mathematical Statistics and Bernoulli Society.

Associated Editor, *Probability and Mathematical Statistics, Stochastic Models, Stochastic Processes and Their Applications.*

NSF panel in 2000.

Refereed for about every journal in sight.

Book reviews

Doctoral Students

Fang Xue (1998)

Barbara Gonzales (2002)

Post-doctoral Students

Milan Borkovec (1999-2000)

Amites Dasgupta (1999-2000)

Participation in Scientific Conferences

Organized:

Mathematical Sciences Institute Workshop on Stable Processes and Related Topics, Ithaca, Jan. 1990.

Meeting on Stable Processes and Highly Volatile Phenomena, a satellite meeting to the 4th World Congress of Bernoulli Society. Wroclaw, August 1996.

Conference on Lévy Processes and Stable Laws. Warwick University, Coventry, April 2001.

Conference on Stable Laws, Processes and Applications. Oberwolfach, October 2001.

Invited Papers:

Conference on Probability and Stochastic Processes, Knoxville, April 1987. "Suprema of Stable Processes."

Symposium on Probability and Its Applications, Institute of Mathematical Statistics, Fort Collins, August 1988. "Asymptotic Behavior of the Distribution of the Maxima of Stochastic Processes Represented by Multiple Stable Integrals."

SIAM Conference on Applied Probability in Science and Engineering, New Orleans, March 1990. "Stability Distributions in Modeling Soil Erosion Processes."

Conference on Stable Processes at International Banach Center for Mathematics, Warsaw, May-June 1990. "Slepian Inequality for Stable and Infinitely-Divisible Laws."

Institute for Mathematics and Its Applications Workshop on New Directions in Time Series Analysis, Minneapolis, July 1990. "Integrability of Sample Paths of Stable Processes."

American Mathematical Society Eastern Section Meeting, Bethlehem, April 1992. "Rice Formula: The Expected Number of High and Low Level Crossings for Stationary Stable Processes."

Workshop on Multiple Wiener-Itô Integrals and Their Applications at Centro de Investigacion en Matematicas, A.C., Guanajuato, Mexico, July 1992. "Zero-One Laws for Multiple Integrals."

VI Congreso Latinoamericano de Investigacion de Operaciones, Mexico City, Mexico, October, 1992. " Inequalities for Non-Gaussian Models."

Second International Symposium: Probability and Applications, Bloomington, March, 1993. "New Results on the Slepian Inequality for Non-Gaussian Processes."

American Mathematical Society Meeting, Knoxville, March, 1993. "Stable Processes with Sample Paths in Orlicz Spaces."

The International Conference on Approximation, Probability and Related Fields, Santa Barbara, May 1993. "Stable Processes with Sample Paths in Orlicz Spaces."

23d Lunteren Meeting in Probability and Statistics, Lunteren, Holland, November 1994. "Concentration Inequalities and 0-1 laws for Lévy Chaos".

AIO-Network Stochastics Workshop, Lunteren, Holland, November 1994. "Stochastic Processes with Heavy Tails".

1st International Conference in Applied Probability and Time Series Analysis, Athens, Greece, March 1995. "A Class of Shot Noise Models for Financial Applications".

21st European Meeting of Statisticians, Aarhus, Denmark, August 1995. "Lower tails of self-similar stable processes".

Workshop "Future of Applied Stable Time Series Models". Santa Barbara, December 1995. "Level Crossings of Absolutely Continuous Stationary Stable Processes".

Meeting on Stable Processes and Highly Volatile Phenomena, a satellite meeting to the 4th World Congress of Bernoulli Society. Wroclaw, August 1996. "Long memory and heavy tails in communication networks".

AMS Regional meeting, Chattanooga, October 1996. "Symmetric infinitely divisible processes with sample paths in Orlicz spaces and absolute continuity of infinitely divisible processes".

Joint IMS meeting and Anniversary Conference for UNC CHapel Hill. Chapel Hill, October 1996. "Level crossings of stable processes".

Annual Meeting of AMS, San Diego, January 1997. "Long range dependence and heavy tails".

Workshop on Scaling, Long Range Dependence and Self-Similarity. Guanajuato, Mexico, March 1997. "Long range dependence caused by heavy tails".

INFORMS meeting, San Diego, May 1997. "Effect of long range dependence on network performance".

Symposium on Stable processes and their Applications, Okayama, Japan, August 1997. "Level crossings of stable processes".

Workshop on Extreme Values and Heavy Tails. Rotterdam, Holland, December 1997. "Heavy tails, long range dependence, large deviations and performance of certain fluid queues".

Meeting "Extremes – Risk and Safety". Gothenburg, Sweden, August 1998. "Overflow/ruin probabilities when the input in the queue is heavy tailed and there is dependence in the tails".

Workshop "Stochastic Modelling and Analysis of Communication Networks", Lund, Sweden, October 1998. “Heavy tails and long–range dependence in communication networks” (keynote lecture).

Conference “Lévy Processes: Theory and Applications”, Centre for Mathematical Physics and Stochastics, Aarhus University, Aarhus, Denmark, January 1999. “Certain probabilistic aspects of semistable laws”.

Workshop “Heavy Tails and Queues”. Eindhoven, The Netherlands, April 1999. “Steady state probabilities for fluid queues” (keynote talk).

Conference “Applications of Heavy Tailed Distributions in Economics, Engineering and Statistics”. American University, Washington, DC, June 1999. “Ruin probability with claims modeled by a stationary ergodic stable process”.

German Open Conference on Probability and Statistics. Hamburg, March , 2000. “Long strange segments of a stochastic process and long range dependence”.

International Symposium “Extreme Value Analysis. Theory and Practice”. Leuven, August 2001. “Limits of On/Off hierarchical product models for data transmission”.

2nd Conference “Lévy Processes: Theory and Applications”, Centre for Mathematical Physics and Stochastics, Aarhus University, Aarhus, Denmark, January 2002. “Tails of solutions of certain nonlinear stochastic differential equations driven by heavy tailed Lévy motions”.

International Conference on Mathematics in Finance. Berg-en-Dal, Kruger National Park, South Africa, August 4-9, 2002. “Multivariate extremes, risk estimation and aggregation”.

24th European Meeting of Statisticians, Prague, August 2002 (a session organizer). “Tails of solutions of certain nonlinear stochastic differential equations driven by heavy tailed Lévy motions”.

American Mathematical Society Fall 2002 Western Sectional Meeting. “Storage processes with a self-similar and infinitely divisible input”. Salt Lake City, October 26-27, 2002.

Contributed Papers:

Annual Meeting of Institute of Mathematical Statistics, Maastricht, August 1985. “The Supremum Distribution of Gaussian Processes.”

Annual Meeting of Israeli Statistical Association, Jerusalem, May 1986. “Sample Moduli of Continuity of Gaussian Processes - Metric Entropy Approach.”

Annual Meeting of American Mathematical Society, San Antonio, January 1987. “Continuity of Gaussian Processes.”

Stochastic Processes and Their Applications, 16th Conference, Stanford, August 1987. “Extrema of Stable Processes.”

Annual Meeting of American Mathematical Society, Atlanta, January 1988. “The Tail of a Multiple Stable Integral.”

Stochastic Processes and Their Applications, 20th Conference, Naharia, June 1991. “Distribution of Sublinear Functionals of Infinitely Divisible Processes.”

Stochastic Processes and Their Applications, 21st Conference, Toronto, June 1992. “Subexponentiality of the product of independent random variables”.

Stochastic Processes and Their Applications, 23st Conference, Chapel Hill, June 1994. “Association of infinitely divisible random vectors”.

1st International Conference on High Frequency Data in Finance, Zürich, March 1995. “Shot Noise Models in Finance”.

4th World Congress of Bernoulli Society. Vienna, August 1996. “Level crossings of stable processes”.