Curriculum Vitae

ANATOLE KATOK

Born: August 9, 1944 Washington, D.C.
Marital Status: Married, 3 children

EDUCATION

Moscow State University, M.A., 1965
Moscow State University, Ph.D., 1968

ACADEMIC POSITIONS

1996- Raymond N. Shibley Professor, The Pennsylvania State University.
1990- Professor, The Pennsylvania State University.
1984-90 Professor, California Institute of Technology.
1978-84 Professor, University of Maryland, Chair in Analysis.
1973-78 Senior Scientific Research Worker, Central Economics- Mathematics Institute (USSR Academy of Science).
1968-73 Jr Scientific Research Worker, Central Economics- Mathematics Institute (USSR Academy of Science).

VISITING APPOINTMENTS (from one month to one year)

2016 Yeshiva University
2010 Weizmann Institute of Science, Rehovot, Israel
2010 University of Paris VI
2010 Institute Mittag-Leffler, Stockholm
2009 Morningside Institute/Mathematics Institute Chinese Academy of Sciences, Beijing
2008 University of Paris XIII
2007 Mathematical institute Polish Academy of Sciences, Warsaw
2006 Nicolas Copernicus University, Torun
2005 University of Paris VII
2003 Invitation Fellowship from the Japan Society for the Promotion of Science
2002 University of Paris XIII
2002 ETH Zurich
2001, 2002, 2003 Independent University of Moscow
2000 Cambridge University
1999 Tsin Hua University, Taiwan
1997 ETH, Zurich
1997 University of Rome II
1996-97 Erwin Schroedinger institute for Mathematical Physics, Vienna
1996 National University of Uruguay
1996 Tata Unstitute for Fundamental Research, Bombay, India
1995 Stefan Banach Center, Polish Academy of Sciences, Warsaw
1994 Mathematics Research Center, University of Warwick
1993 University of Paris VI
1993 Université de Grenoble I

1992 Mathematical Sciences Research Institute, Berkeley
1991 IHES, Bures-sur-Yvette.
1989 ETH, Zurich
1988 Federal University, Mexico City
1987 SFB "Geometrie und Analysis," Gottingen
1986 Federal University, Mexico City
1986 SFB "Geometrie und Analysis," Gottingen
1983-84 Mathematical Sciences Research Institute, Berkeley
1982 IHES, Bures-sur-Yvette
1982 Hebrew University, Jerusalem
1981 IMPA, Rio de Janeiro, Brazil
1980 Hebrew University, Jerusalem
1979 IMPA, Rio de Janeiro, Brazil
1979 Stanford University
1978 IHES, Bures-sur-Yvette
1978 University of Rome.

GRANTS, CONTRACTS, AWARDS AND PRIZES

MMS Annual Prize for Young Mathematicians, 1967
NSF Grant MCS 78-15278
NSF Grant MCS 79-03046
U.S.-Israel Binational Science Foundation Grant 1981-83
NSF Grant MCS 82-04024
U.S.-Israel Binational Science Foundation Grant 1985-87
NSF Grant DMS 85-14630
NSF Grant DMS 90-11749
NSF Grant DMS 90-17995
NSF Grant DMS 94-04061
NSF Grant DMS 97-04776
NSF Grant DMS-00-71339 (five years)
NSF Grant DMS-05-05539
NSF Grant DMS-08-03880
NSF Grant DMS-10-02554
NSF Grant DMS-13-04830
NSF Grant DMS-16-02409
Several special travel grants from NSF
Penn State Graduate Faculty Teaching award, 2001
Penn State VIGRE NSF grant co-PI (with D. Arnold, N. Higson, and G. Mullen)
NSF Grant 0502205, Penn State MASS Program, PI (with G. Andrews, S. Katok and S. Tabachnikov)
NSF Grant DMS-0940732 PI (with D. Burago, S. Katok, Ya. Pesin) Workshop in Dynamical Systems and Related Topics
NSF Grant DMS-1343081 PI (with S. Katok, Ya. Pesin, F. Rodriguez Hertz) Workshop in Dynamical Systems and Related Topics
NSF Grant DMS-09-43603, EMSW21-MCTP: Penn State MASS Program, PI (with G.Andrews, S. Katok. J. Roe, S. Tabachnikov)

MEMBERSHIP IN HONORARY SOCIETIES AND OTHER HONORS

American Academy of Arts and Sciences, elected 2004
Inaugural class of Fellows of the American Mathematical Society, 2012.
Conferences:
Recent Progress in Dynamics, 2004, MSRI Berkeley, 60th birthday
Progress in Dynamics, 2009, IHP Paris, 65th birthday
Recent Progress in dynamical systems and related topics, 2014, Banff, 70th birthday
Workshop on Dynamical Systems and Related Topics, 2014, Penn State, 70th birthday

SELECTED PROFESSIONAL ACTIVITIES

Director, Center for Dynamical Systems and Geometry, Department of Mathematics, The Pennsylvania State University.
Chairman, Scientific Advisory Board, MASS, Department of Mathematics, The Pennsylvania State University.
Journal of Modern Dynamics, founder and Editor-In-Chief, 2006–

Ergodic Theory and Dynamical Systems journal published by Cambridge University Press, Executive Editor 1981-1987, Editorial Board 1988-1993, Survey Editor 1994- 2011, Editor 1997- 2011, Editorial Board, 2011-

Mathematical Research Letters, Editorial Board,1994-2004

Discrete and Continuous Dynamical Systems, Editorial Board, 1995–

Moscow Mathematical Journal, Editorial Board,2000–2007, Editor 2008–

Journal of Fixed Point Theory and Applications, Editorial Advisory board, 2006–

Electronic Research Announcements in Mathematical Sciences Advisory board, 2007–

Editor of the book series "Cambridge Tracts in Mathematics" and "Cambridge Studies in Advanced Mathematics", Cambridge University Press, 1999–

Organizer of Special Year in Ergodic Theory and Dynamical Systems at Maryland, 1979-80 and Editor of *Proceedings* published by Birkhauser in 2 volumes in *Progress in Mathematics* series.

Program Committee for Mathematical Sciences Research Institute in Berkeley (MSRI) for 1983-84.

NSF Advisory Committee in Mathematical Sciences, 1983-86.

Trustee, MSRI Berkeley, 1985 - 1991.

Chairman, Membership Committee, MSRI Berkeley, 1986-89.

Research Briefing Panel on Non-linear Science, National Research Council, 1987.

AMS Committee on Translations, 1988 - 1992.

MSRI Scientific Advisory Council, 1989 - 1993

International Science Foundation, Panel on Mathematics 1993-94

Institute for Mathematics and its Applications Board of Governors, 1993-96

Civilian Research and Development Foundation, Panel in Mathematics and Computer Science, 1996

Founder of the Semi-annual Regional Workshop in Dynamical Systems and Related Topics, Penn State and Maryland, 1990 -

Organizer and co-organizer of a series of conferences and workshops known under the general name "Geometric Rigidity": 1984-

Program Committee and organizer of workshops for the semester in Dynamical Systems and Ergodic theory at S. Banach Mathematical Center in Warsaw, Poland, 1995.

Organizer, and Editor of two volumes of *AMS Proc. Symp. Pure Math*, AMS Summer Institute in Smooth Ergodic Theory, Seattle, 1999

Organizer, Semester in Ergodic theory, Geometric Rigidity and Number Theory, Newton Insitute, Cambridge, Spring 2000

Oversight panel for IHES, Bures-sur-Yvette, 2001

Reviewing Committee, Centre de mathmatiques de l'Ecole Polytechnique, Palaiseau, 2004

Chairman, Scientific Committee, program "Dynamical systems: Geometric structures and Rigidity", S. Banach Mathematical Center in Bedlewo, Poland, 2008.

Chairman, Scientific Committee, program "Modern Dynamics and its interaction with analysis, geometry and number theory", S. Banach Mathematical Center in Bedlewo, Poland, 2011.

SELECTED INVITED TALKS

I. General Meetings

International Congress of Mathematicians, Moscow, 1966 (15-minute talk)

Plenary sessions of Moscow Mathematical Society, 1966, 1968, 1976, 1999

Plenary session of the London Mathematical Society, Birmingham, 1979

Session of American Mathematical Society, Birmingham, Alabama, 1979 (one-hour invited talk)

International Congress of Mathematicians in Warsaw, 1983

International Congress in Mathematical Physics, Boulder, Colorado, 1983

Interdisciplinary Conference on Randomness, Columbus, 1988

Plenary session of Swedish Mathematical Society, Uppsala, 1995

Symposium Mathematics in the Sciences, Leipzig, 1998

Spitalfields Day, Cambridge, 2000

Fundamental Mathematics Today, Moscow, 2001.

Kolmogorov and contemporary mathematics, Moscow 2003

Plenary session of the Mathematical Society of Japan 2003

Modern Analysis and Moscow University, Hebrew University Jerusalem 2004

II Memorial and endowed Lecture series

Frank J. Hahn Lectures, Yale University, 1980
Rufus Bowen Memorial Lectures, Berkeley, 1982
Schlumberger Lectures, Rice University, 1982
Ramakant Muzumdar Commemorative Lectures, University of Bombay, 1996
Frontiers in Mathematics lectures, Texas A & M University, 2005
Mordell Lecture, Cambridge University, 2009

III. Lecture Series

Leningrad State University, 1971
Ninth Summer School, Ukrainian Academy of Sciences, 1971
Voronej State University, 1973
Voronej Winter School, 1976
University of Rome, 1978
Symposium on Diffeomorphisms and Foliations, University of Warwick, 1979
Summer Workshop on Ergodic Theory, Stanford University, 1979
IMPA, Rio de Janeiro, 1979
Frank J. Hahn Lectures, Yale University, 1980
Ecole d'Ete de Physique Theorique, Les Houches, France, 1981
Rufus Bowen Memorial Lectures, Berkeley, 1982
Sitges Conference on Statistical Mechanics, Sitges, Spain, 1982
Seventh Latin American School in Mathematics, Caracas, Venezuela, 1984
Semester in Dynamical Systems, Mexico City, Spring 1986
Third Mathematical Summer Institute, Shanghai, China, June 1986
Symposium on Smooth Ergodic Theory, University of Warwick, 1986
Semester in Dynamical Systems, S. Banach Mathematical Center, Warsaw, 1986
Special Year in Dynamical Systems, University of Maryland, 1987
Federal University, Mexico City, 1988
Workshop in Discrete Groups and Ergodic Theory, ICI Gucia, Palermo, 1990
Summer Session of CIME, Montecatini, Italy, 1991
MSRI Berkeley, 1992
Universite de Grenoble I, 1993
University of Warwick 1993, 1994
Euroconferences in Mathematics on Crete 1994
Semester in Dynamical Systems and Ergodic Theory, S.Banach Mathematical
Center, Warsaw, 1995.
Tata Institute for Fundamental Research, Bombay, 1996
Erwin Schroedinger Institute, Vienna, 1997
Max-Planck-Insitute for Mathematics in Natural Sciences, Leipzig, 1997
Tsin Hua University, Taiwan, 1999
AMS Summer Institute in Smooth Ergodic Theory, Seattle, 1999
Newton Institute, Cambridge, 2000
DFG meeting on Ergodic theory, Analysis and Efficient Simulation of Dynamical
Systems, Irsee, Germany, 2000
Universita degli Studi di Cagliari, Italy, 2000
Independent University of Moscow, 2001, 2002, 2003
ETH Zurich, 2002

University of Paris XIII 2002
Cursos de Verano, El Escorial Spain, 2003
Hebrew University of Jerusalem, 2004
First Summer school in Dynamical Systems, Shanghai, 2005
Mathematical institute Chinese Academy of Sciences, 2005
Mathematical Institute Polish Academy of Sciences, 2007
Mathematical institute Chinese Academy of Sciences, 2009
Institute Mittag-Leffler, 2010
Conference Center of the Mathematical Institute, Polish Academy of Sciences, 2011

IV. Conferences (selected)

The Fifth International Conference on Non-linear Oscillations, Kiev, 1969
The Sixth All-union Topological Conference, Tbilisy, 1972
The Fourth International Symposium on Information Theory, Leningrad, Repino, 1976
Symposium on Dynamical Systems and Ergodic Theory, Warsaw, 1977
Conference in Ergodic Theory, Oberwolfach, 1978
International Conference on Non-linear Dynamics, New York, 1979
Conference in Topological Dynamics, Oberwolfach, 1980
Mathematische Arbeitstagung, 1980
London Math. Society Symposium on Ergodic Theory, Durham, 1980
Conference on Dynamical Systems, Warwick, 1980
Workshop in Ergodic Theory, Jerusalem, 1980
International Symposium on Dynamical Systems, Rio de Janeiro, 1981
Conferences in Dynamical Systems (Jurgen Moser conferences), Oberwolfach, 1981, 1983, 1985, 1987, 1989, 1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, 2007, 2009, 2011, 2013, 2015
Conference in Honor of S. Kakutani, Yale University, 1982
Conference in Ergodic Theory, Luminy, France, 1982
Conference on Combinatorial Structure of Rational Maps, Duluth, 1983
Western States Math. Physics Meeting, Pasadena, 1983
Dynamics Days, San Diego, 1984
MSRI Conference on Two-dimensional Topology, Berkeley, 1984
International Conference in Random Fields, Koszeg, Hungary, 1984
Conference in Spectral Geometry, Stanford, 1985
Conference in Ergodic Theory and Dynamical Systems, Oberwolfach, 1986
Jerusalem-Gottingen Colloquium in Mathematics, Gottingen, 1987
Conference in Global Differential Geometry, Oberwolfach, 1987
Western States Math. Physics Meeting, 1988
Greene Conference on Hamiltonian Mechanics, San Diego, 1988
Conference on Rigidity of Geometric Structures, Boulder, 1989
International Workshop in Dynamical Systems, Rio de Janeiro, 1989
Conference in Measurable Dynamics, Maryland, 1989
Workshop on Measurable Dynamics, Minnesota, 1990
Workshop on Twist Maps, Minnesota, 1990
Conference on Geometric Rigidity, Northwestern University, 1990
Conference on Low-dimensional Dynamics, Maryland, 1990

International Conference in Dynamical Systems, Lyon, 1990

International Dynamical Systems Conference, Northwestern University, 1991

Conference on Foliations and Singularities in memory of C. Godbillon and J. Martinet, Strasbourg, 1991

Workshop on Lie Groups, Ergodic Theory and Geometry, MSRI, 1992

Conference on Nielsen Theory and Dynamical Systems, Mt. Holyoke, 1992

International Conference on Dynamical Systems, Porto, 1992

CIRM Marseilles-Luminy, Conference on Rigidity and Deformations for Hyperbolic Systems, 1993

Dynamics Days, Budapest, 1994

Workshop on Dynamical Systems and Related Topics, University of Maryland, 1992, 1994, 1995

Midwestern Dynamical Systems Conference Northwestern University 1994

International Congress on Dynamical Systems, Montevideo, 1995

Symposium on Ergodic Theory on Riemannian Manifolds, Warwick 1995

Conference on Lie Groups and Ergodic Theory, Bombay 1996

International Conference in Dynamical Systems, Beijing 1996

Geometry Festival, Duke U., 1997

Southwest Dynamical Systems Conference, U.North Texas, 1997

Symposium in Discrete Dynamical Systems in memory of W. Szlenk, Barselona, 1997

Conference on Models for Integrating Research into the Undergraduate Experience, Tuscon, 2000

Conference on Perturbative Methods for Partial Differential Equations and Dynamical Systems Cagliari, Italy 2000

International workshop in Dynamical Systems and Geometry in honor of Michel Herman, IMPA, Rio, 2001

I.G Petrovskii 100th Anniversary Conference, Moscow 2001

Jurgen Moser Memorial Conference, Zurich, 2001.

Progess in Nonlinear Science, Nizhnij Novgorod, 2001

Egrodic Theory and Dynamical Systems, Paris 2001

Fundamental Mathematics today Moscow, 2001

Ergodic Theory and Dynamical Systems, Torun, 2002

Conference dedicated to 60th birthday of J. Mather Princeton, 2002

Colloque International a la memoire de Michel Herman, Paris 2002

Midwest dynamical systems, Evanston, 2003

Probability in Mathematics, Conference in honor of Hillel Furstenberg, Jerusalem 2003

EquaDiff 2003, Plenary talk, Hasselt Belgium

Topology and Foliations, Kyoto, 2003

Hilbert 16th and related problems in dynamics, geometry and analysis, Moscow, 2003

Workshop in Dynamical Systems; Hebrew University of Jerusalem, 2004

Conference in memory of W. Szlenk, Warsaw, 2005

International conference in Dynamical systems Huangshan, China, 2005

Workshop on Partial Hyperbolicity et al, Fields institute, Toronto, 2006

Lie Groups: Dynamics, Rigidity, Arithmetic, conference dedicated to sixtieth birthday of G. Margulis, Yale, 2006

Conference dedicated to seventieth birthday of Ja.G.Sinai, Maryland, 2006

International Workshops on Global Dynamics beyond uniform hyperbolicity: Chicago, 2006; Beijing 2009; Bedlewo 2013

Ergodic Theory and Dynamical Systems, Szklarska Poreba, Poland 2006

Geometric Group Theory, Hyperbolic Dynamics and Symplectic Geometry, Oberwolfach 2006, 2008, 2010

Randomness and hyperbolicity in dynamical systems, in honor of Domokos Szasz 65th birthday, Budapest 2006

Conference in honor of H. Furstenberg, Maryland, 2007

Ergodic theory, Paris 13, 2008

Ergodic theory, IHP Paris, 2009

Rice Dynamics Meeting, Houston, TX, 2013

Dynamics on Homogeneous Spaces and Applications (Conference in honour of Grigory Margulis on his Doctorate Honoris Causa from University Lyon 1) Lyon, France, 2013

Fields Medal Symposium, Toronto, Canada, 2013

Research Group Conference-Homogeneous Dynamics, Unipotent Flows, and Applications (in honor of Marina Ratner and her work), Einstein Institute of Mathematics, Hebrew University, Jerusalem, Israel, 2013

Ergodic theory and Dynamical Systems, Torun, Poland, 2014

Hyperbolic Dynamics and Statistical Physics, in honor of Domokos Szasz 75th birthday, ESI Vienna, 2016

Dynamics, Geometry and Number Theory, in honor of the 70th birthday of Gregory Margulis IHP Paris, 2016.

V. Colloquium Talks at North American Universities

1978: Cornell University, University of Minnesota, University of California-Berkeley, Harvard University, Brown University

1979: Rice University, New York University

1980: University of North Carolina, University of Wisconsin, SUNY-Albany

1981: The Pennsylvania State University, New York University, Princeton University

1982: University of Washington, Stanford University, New York University, Johns Hopkins University

1983: California Institute of Technology, Wayne State University, University of Michigan, Michigan State University, Ohio State University, Princeton University, (Math. Physics), University of California-Berkeley

1984: University of Oregon, Stanford University, University of California-Los Angeles

1985: University of Minnesota, University of Arizona (Applied Math.), University of California-San Diego, University of Southern California

1987: Boston University, University of Maryland,

1988: University of Arizona, University of California-Santa Cruz, Northwestern University, University of California-Los Angeles

1989: Caltech (Physics Colloquium), University of Indiana, University of Maryland

1991: University of Pennsylvania, University of California-Berkeley,

1992: University of California-Los Angeles, University of Chicago, Ohio State University, University of Oregon, University of Michigan

1993: Yale University

1994: University of Chicago

1995: Washington University St Louis, University of Missouri

1998: MIT

1999: Georgia Institute of Technology, Carnegie Mellon University, Cornell University

2000: University of Maryland

2003: University of California-Berkeley, California Institute of Technology

2004: MSRI/Evans Lecture at Berkeley, Micihgan State University, Tufts University

2005: Indiana University, MIT, University of Texas-Austin

2006: University of Toronto, Montreal city colloquium

2007: University of South Alabama

2008: Ohio State University, University of North Carolina

2009: Brigham Young University, University of Maryland

2010: University of Houston, Rice University, University of Texas-Austin

2011: Binghamton University; SUNY, Stony Brook

2012: Rice University

2013: Yale University

2015: University of Chicago, Yeshiva University