

CURRICULUM VITAE

Yuriy V. Kolomiyets (= Kolomiets)

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FIELDS OF INTEREST:

Stochastic Processes

Stochastic Approximations

Functional Central Limit Theorem

Homogenization of Random Partial Differential Equations

Dynamical Systems with High Oscillations

Diffusion Approximation for Random Differential Equations

Fractional Stability of the Diffusion Approximation

Large Deviation Principle for Stochastic Processes

Moderate Deviation Principle for Stochastic Processes

Law of Large Numbers

Dynamical Systems with High Oscillations

Averaging Principle for Stochastic Differential Equations

Fractional Stability of the Averaging Principle

Yuriy V. Kolomiyets

EDUCATION:

- 2006 Ph.D., Kent State University
 Advisors: Dr. H. Allouba and Dr. V. Andriyevskyy
 Dissertation: Asymptotical Behavior of
 Randomly Perturbed Dynamical Systems
- 1991 Candidate of Phys.-Math. Sc., researcher of Candidate's Degree,
 Institute of Mathematics of the National Academy of Sciences of Ukraine,
 Kiev (former USSR)
 Advisor: Dr. M. Portenko
 Dissertation: Averaging Principle for Randomly Perturbed
 Partial Differential Equations
- 1981 M. Sc., Donetsk State University, Donetsk, Ukraine (former USSR)
 Advisor: Dr. Iosif I. Gikhman
 Thesis: Goursat's Problem for Stochastic Differential Equations with Jumps

AWARDS:

- 2007 Dissertation Award given by
 Graduate Student Senate of Kent State University
- 2006-2002 Academic Award for outstanding academic achievement given by
 the Phi Beta Delta Honor Society for International Scholars
- 2006 International Travel Grant given by
 the International Travel Grant Committee and
 the Graduate Student Senate of Kent state University
- 2004, Spring University Fellowship,
 Kent State University
- 1995 Academic Award for Best Publications given by
 Scientific Committee of Institute of Applied Mathematics
 and Mechanics of National Academy of Sciences of Ukraine

Yuriy V. Kolomiyets

EXPERIENCE:

- | | |
|----------------|--|
| 2007, Spring | Ph.D. Degree awarded at
Kent State University |
| 1998 - Present | Senior Researcher,
Dept of Probability Theory and Math Statistics,
the Institute of Applied Mathematics and Mechanics of
the National Academy of Sciences of Ukraine, Donetsk |
| 2007, Spring | Part-time Temporary Instructor (OPT)
Dept of Mathematical Sciences,
Kent State University |
| 2006, November | Defended Ph.D. Dissertation in Mathematical Sciences at
Kent State University |
| 2001 - 2006 | Graduate Assistant,
Department of Mathematical Sciences,
Kent State University |
| 1997 - 2001 | Professor of Mathematics,
Donetsk National Technical University,
Donetsk, Ukraine
(part-time) |
| 1999 - 2000 | Visiting Professor,
Volzhsky Human Institute, Volzhsky, Russia |
| 1992 - 1998 | Researcher,
Dept of Probability Theory and Mathematical Statistics,
the Institute of Applied Mathematics and Mechanics
of the National Academy of Sciences of Ukraine, Donetsk, Ukraine |
| 1995 - 2001 | Professor of Mathematics,
Donetsk Justice Institute,
Donetsk, Ukraine (part-time) |

Yuriy V. Kolomiyets

- 1991, September Candidate Degree awarded at
the Institute of Mathematics of
the National Academy of Sciences of Ukraine, Kiev, Ukraine
- 1991, June Defended Candidate of Physics - Mathematics
Dissertation at the Institute of Mathematics of
the National Academy of Sciences of Ukraine, Kiev, Ukraine
- 1989 - 1991 Researcher a Candidate's Degree,
Dept of Theory of Stochastic Processes, the Institute of Mathematics
the National Academy of Sciences of Ukraine, Kiev, Ukraine
- 1988 - 1992 Minor Researcher,
Dept of Probability Theory and Mathematical Statistics,
the Institute of Applied Mathematics and Mechanics
of the National Academy of Sciences of Ukraine, Donetsk, Ukraine
- 1985 - 1988 Engineer,
Dept of Probability Theory and Mathematical Statistics,
the Institute of Applied Mathematics and Mechanics
of the National Academy of Sciences of Ukraine, Donetsk, Ukraine
- 1981 - 1986 Professor of Mathematics,
Dept of Algebra and Probability Theory,
Donetsk State University, Donetsk, Ukraine (part-time)
- 1981 - 1985 Researcher a Candidate's Degree,
Dept of Algebra and Probability Theory,
Donetsk State University, Donetsk, Ukraine
- 1981, June M. S. Degree awarded at
Donetsk State University, Donetsk, Ukraine
- 1981, June Defended M. S. Thesis in Mathematics at
Donetsk State University, Donetsk, Ukraine

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PUBLICATIONS:

- (1) **Asymptotic Behavior of Randomly Perturbed Dynamical Systems**, Ph. D. Dissertation, Kent State University, 2006, 38 p., <http://www.ohiolink.edu/etd/view.cgi?kent1164124028>
- (2) **Averaging for Systems of Stochastic Equations with Random Disturbances**, *Theory Stoch. Process.* 6 (2000), no. 1-2, 62–78. MR2007724
- (3) **On the Weak Convergence of Solutions of Randomly Perturbed Evolution Equations**, *Ukrainian Math. J.* 47 (1995), no. 2, 250–258 (1996). MR1353626
- (4) **The Averaging of Evolutional Equations with Rapidly Oscillating Disturbed Coefficients**, *Probab. Theory Math. Stat.* 2 (1995), 354–360. Zbl 1029.60517
- (5) **On the Weak Convergence of the Solutions to Random Disturbing Partial Differential Equations**, (Russian), *Theory Stoch. Process.* 1(17) (1995), no. 1, 35–44. Zbl 1026.60033
- (6) **Averaging Randomly Perturbed Evolution Equations**, *Ukrainian Math. J.* 45 (1993), no. 7, 1066–1076. MR1260655
- (7) **Averaging for Partial Differential Equations whose Coefficients are Perturbed by Jump Markov Processes** *Ukrainian Math. J.* 44 (1992), no. 10, 1253–1261. MR1201136
- (8) **Averaging Evolution Equations that can be Perturbed by Random Processes with Jumps**, *Ukrainian Math. J.* 44 (1992), no. 2, 175–184. MR1184127
- (9) **Averaging of Evolution Equations with Perturbed Coefficients**, (Russian) *Infinite-dimensional stochastic analysis (Russian)*, 67–76, Akad. Nauk Ukrain. SSR, Inst. Mat., Kiev, 1990. MR1127603
- (10) **Averaging of Evolution Equations with Random Perturbations**, (Russian) *Theory of random processes and its applications (Russian)*, 72–81, "Naukova Dumka", Kiev, 1990. MR1098110

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PAPERS IN PREPARATION / SUBMITTED:

- **Fractional Stability of Diffusion Approximation for Random Differential Equations**, submitted
- **Fractional Stability of Diffusion Approximation for Random Differential Equations (Critical Case)**, in preparation
- **Fractional Stability of Averaging Principle for Random Differential Equations**, in preparation

INTERNATIONAL CONGRESS of MATHEMATICIANS:

- **On Behavior of Solutions of Evolution Equations Perturbed by Random Processes**, Abstract of Short Comm. and Poster Sessions of the ICM, Berlin, August 18–27 (1998)
- **Asymptotic Behavior of the Solutions of the Evolution Equations Perturbed by Markov Jump Processes**, Abstract of Short Comm. of the ICM, Zurich, August 3–11 (1994), p. 149

CONFERENCES/SEMINARS (TALKS):

- **Fractional stability of diffusion approximations for random differential equations**,
A Conference "Modern Stochastics: Theory and Applications" dedicated to the 60th anniversary of the Department of Probability Theory of Kyiv National Taras Shevchenko University and to the memory of M.I. Yadrenko, Kyiv National Taras Shevchenko University, Kyiv, Ukraine June 19–23, 2006
- **Fractional Stability for Functional CLT**,
A Conference in honor of Tom Kurtz on his 65th birthday "Markov Processes and Related Topics", University of Wisconsin–Madison, July 10–13, 2006

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- **Fractional Stability for Functional CLT**,
2006 NSF/CBMS Regional Conference in the Mathematical Sciences-
"Probabilistic and combinatorial approach in analysis",
Kent State University,
August 06–13, 2006
- **Fractional Stability of Diffusion Approximation for Random Differential Equations**,
A Conference in honor of Rafail Z. Khasminskii
on the occasion of his 75 Birthday
"Asymptotical Analysis in Stochastic Processes,
Nonparametric Estimation and Related Problem",
Wayne State University,
September 15–17, 2006
- **Probability theory and Mathematical Statistics Seminar**,
Dept of Probability and Mathematical Statistics, IAMM, NAS
of Ukraine,
Head of Seminar Dr. S. Ya. Makhno,
June 2006
- **Probability Seminar**,
Department of Mathematical Sciences, Kent State University,
Head of Seminar Dr. O. Mocioalca,
April, 2006
- **Fourier Analysis and Approximation Theory Seminar**,
Donetsk National University, Donetsk, Ukraine,
Head of Seminar Dr R. Trigub and Dr. V. Zastavnyy,
June 2006;
- **Measure Theory Seminar**,
Department of Mathematical Sciences, Kent State University,
Head of Seminar Dr. J. Diestel and Dr. A. Zvavich,
October, 2006

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TEACHING EXPERIENCE:

Kent State University, Kent, OH

- MATH 12002, Analytic Geometry and Calc I, Spring 2007, Fall 2006, Spring 2006
- MATH 11022, Trigonometry, Fall 2006
- MATH 11009, Modeling Algebra, Fall 2006
- MATH 14001, Basic Math Concepts I, Fall 2006
- MATH 11012, Intuitive Calc, Spring 2005, Fall 2004
- MATH 11011, College Algebra, Spring 2003, 2004; Fall 2002, 2003

Donetsk National Technical University, Donetsk, Ukraine

- Probability Theory and Mathematical Statistics, 1997 – 2001

Volzhsky Human Institute, Volzhsky, Russia

- Theory of Stochastic Processes, 1997 – 2001

Donetsk State University, Donetsk, Ukraine

- Linear Algebra, Fall 1981, 1983 – 1985
- Probability Theory and Mathematical Statistics, 1984 – 1985
- Theory of Stochastic Processes, Spring 1984

PROFESSIONAL AFFILIATIONS:

- 2001 - Present American Mathematical Society