



Oleksandr (Alexander) G. Kukush

Date of birth:
Citizenship:

23 May 1957
Ukraine

Contacts:

***Institute of Mathematics,
National Academy of Sciences of Ukraine,
3, Tereshchenkivska Str.,
Kiev, Ukraine 01601
e-mail: akukush@imath.kiev.ua
tel. (044)2345372
fax (044)2352010***

Degrees

- June 2002** **Professor of Department of Mathematical Analysis**
- May 1995** **Doctor of Mechanics & Mathematics Science, Institute of Mathematics of National Academy of Sciences of Ukraine, Kyiv, Thesis "Asymptotic properties of estimators for infinite-dimensional parameters of stochastic processes"**
- May 1982** **Candidate of Science (Ph.D.), Kyiv Taras Shevchenko State University Thesis "Some problems of the weak convergence of measures on infinite-dimensional spaces" under supervision of Prof. Anatoliy Ya. Dorogovtsev**
- June 1979** **Master of Sciences Diploma with honour Speciality: Mathematician, Educator Specialization: Mathematical Analysis Kyiv Taras Shevchenko State University, Faculty of Mechanics & Mathematics**

Employment

- 2026 –** **Leading scientific researcher of Department of Theory of Random Processes, Institute of Mathematics of National Academy of Sciences of Ukraine**
- 2006 –** **Senior scientific researcher at Institute of Radiation Medicine of Medical Academy of Sciences of Ukraine**
- 1998 – 2023** **Professor at Taras Shevchenko University of Kyiv, Department of Mathematical Analysis, Faculty of Mechanics & Mathematics**
Obligatory courses developed and taught:
- Mathematics (for students of Economy)**
 - Statistics and Econometrics I**
 - Calculus I and II**
 - Theory of measure and of integral.**

- *Functional analysis and integral equations.*
- *Statistical methods in non-life insurance (CT6) – lectures for actuarial students*

- *Probability theory (practical lessons)*

Special courses developed and taught:

- *Errors-in-variables regression models*
- *Nonparametric statistics*
- Theory of optimal strategies in European and American options*
- Spline functions in statistics*
- Stochastic calculus in vector spaces*
- Gaussian measures in Hilbert space*
- Compact sets in spaces of sequences*
- Popular mathematics for schoolchildren*

2016 – 2022 Senior scientific researcher at Taras Shevchenko National University of Kyiv, Faculty of Mechanics & Mathematics

2001-2013, 2017-2022 Senior scientific researcher, National Aviation University, Kyiv

2008 – 2011 Visiting Fellow at Faculty of Business and Economics, Katholieke Universiteit Leuven, Belgium

2004 – 2005 Visiting Fellow at Faculty of Applied Economics, Katholieke Universiteit Leuven, Belgium

2002 Visiting Professor at Department of Applied Economics and Department of Mathematics, Katholieke Universiteit of Leuven, Belgium

2001 – 2002 Postdoctoral research fellowship at Department of Electronic Engineering, Katholieke Universiteit Leuven, Belgium

2000 Assistant Professor at Institute of Statistics, Ludwig-Maximilian

University, Munich, Germany

1999 Professor at Academy of Foreign Trade, Kyiv. Developed and taught obligatory course Higher Mathematics

1993 – 1998 Associate Professor at Taras Shevchenko University of Kyiv, Department of Mathematical Analysis, Faculty of Mechanics & Mathematics

1987 – 1993 Assistant Professor at Taras Shevchenko University of Kyiv, Department of Mathematical Analysis, Faculty of Mechanics & Mathematics

1979 – 1987 Senior scientific researcher at Taras Shevchenko University of Kyiv, Faculty of Mechanics & Mathematics

Management and Administration

2020 – 2021 Member of the group of experts for estimation of efficiency of research activity of higher schools, order of Ministry of Education and Science N1111

2020 – 2021 Member of the working group organized by NAS of Ukraine on mathematical modelling of problems related to the epidemic of coronavirus SARS-CoV-2 in Ukraine

Membership in Scientific Organizations

1990 – Kyiv Mathematical Society

2004 – 2017 International Statistical Institute, elected member

1995 – 2002 American Mathematical Society

2004 – 2007 European Mathematical Society

1995 – 2005 Bernoulli Society for Probability Theory and Mathematical Statistics

Membership in Editorial Boards of Journals

2014 – 2022 Modern Stochastics: Theory & Applications

2013 – 2022 Theory of Probability and Mathematical Statistics

1995 – 2021 In the World of Mathematics

Scientific Interests

Mathematical Statistics

Statistics of Stochastic Processes

Biostatistics

Financial Mathematics

Actuarial Mathematics

Olympiad Mathematics

Seminars organized

1996 – 2022 Head of the scientific seminar "Asymptotic methods in Statistics" organized at Faculty of Mechanics & Mathematics, Taras Shevchenko National University of Kyiv, together with Professor R. E. Mayboroda

Supervision experience

14 doctoral students obtained Ph.D.

degree under my supervision

- *Borovitska Anna (2005)*
- *Jönsson Henrik (2005, co-supervisor Professor Dmitrii Silvestrov)*
- *Chernikov Yuriy (2008)*
- *Polekha Mariya (2008)*
- *Malenko Andriy (2009)*
- *Shklyar Sergiy (2009)*
- *Gontar Olena (2009)*
- *Usoltseva Olena (2011)*
- *Repetatska Halyna (2012)*
- *Savchenko Andriy (2015)*
- *Tsaregorodtsev Yaroslav (2018)*
- *Chernova Oksana (2020)*

- Senko Ivan (2017)

Doctor degree obtained under my supervision

- Shklyar Sergiy (2021)

Awards and Grants

- 2008** *The title Honours Official of Education of Ukraine, given by the Ministry of Science and Education of Ukraine*
- 2006** *Taras Shevchenko Award for a cycle of scientific papers, according to decision of Research Council of Taras Shevchenko National University of Kyiv*
- 2009** *Memorable medal in the name of M.M. Bogolubov “For high level of scientific results in mathematical science*
- 2017-2018** *The best lecturer of the Faculty of Mechanics & Mathematics of Taras Shevchenko National University of Kyiv*
- 2018** *Badge “For scientific and educational achievements” from Ministry of Education and Science of Ukraine*
- 1997** *Grant as Soros Associate Professor*
- 2020-2022** *Grant from the National Research Fund of Ukraine*

Lectures at International Conferences

Plenary lecture at the conferences:

-International Conference *Modern Stochastics: Theory and Applications IV*, Kyiv, May 2018.

-*Stochastic Processes in Abstract Spaces*, Kyiv, October, 2015 (2 talks).

-3rd Conference *Mathematics for Life Sciences*, Rivne, September 2015.

-Humboldt Kolleg *Mathematics and Life Sciences: Possibilities, Interlacements and Limits*, Kyiv, August 2010.

-International conference *Functional Methods in Approximation Theory, Operator Theory, Stochastic Analysis and Statistics-II*, dedicated to the memory of A.Ya. Dorogovtsev, Kyiv, October 2004.

-6th International Conference on *Applied Informatics*, Eger, Hungary, January 2004,

-*Functional Methods in Approximation Theory, Operator Theory, Stochastic Analysis and Statistics*, Kyiv, October 2001.

Invited lectures at the conferences:

--*Сучасні проблеми медицини сьогодення: роль лікаря в житті суспільства. Сучасні проблеми офтальмології*, Київ, лютий 2021 р.

--Загальні збори НАМН України «Тридцять п'ять років Чорнобильської катастрофи: існуючі та майбутні дослідження радіологічних та медичних наслідків», Київ, квітень 2021 р.,

--Науково-практична конференція «Екологічні та гігієнічні проблеми сфери життєдіяльності людини», Київ, березень 2022 р.

--International Conference *Modern Stochastics: Theory and Applications V*, Kyiv, June 2021.

-*Limit theorems in Probability Theory, Number Theory and Mathematical Statistics*. International workshop in honour of Prof. V.V. Buldygin, Kyiv, October 2016 (2 co-authored talks).

-Baltic-Nordic-Ukrainian Summer School on Survey Statistics, Kyiv, August 2016.

-International Conference on *Probability, Reliability and Stochastic Optimization*, Kyiv, April 2015.

- Workshop *Mathematics for Life Sciences*, Kyiv, September 2012.
- The Barcelona International Conference on Advances in Statistics, Barcelona, Spain, June 2012.
- 58th World Statistics Congress of the International Statistical Institute, Dublin, Ireland, August 2011.
- *Modern Stochastics: Theory and Applications II*, Kyiv, September 2010.
- Workshop *New Trends of Actuarial Research*, Kyiv, November 2008.
- 22nd Nordic Conference on Mathematical Statistics, Vilnius, June 2008.
- International Summer School *Insurance and Finance: Science, Practice, and Education*, Foros, Crimea, Ukraine, June 2007.
- Fourth Total Least Squares and Errors-in-Variables Modeling Workshop, Leuven, Belgium, August 2006 (two lectures).
- International Summer School *Insurance and Finance: Science, Practice, and Education*, Foros, Crimea, Ukraine, June 2006.
- International Conference *Modern Stochastics: Theory and Applications*, dedicated to the memory Professor M.I. Yadrenko, Kyiv, June 2006 (two lectures).
- 14th International Workshop on *Matrices and Statistics*, Auckland, New Zealand, March-April 2005.
- Conference *Recent Advances in Statistics*, Kanpur, India, January 2005.
- International conference *Functional Methods in Approximation Theory, Operator Theory, Stochastic Analysis and Statistics-II*, dedicated to the memory of A.Ya. Dorogovtsev, Kyiv, October 2004 (two lectures).
- 7th International Conference *Computer Data Analysis and Modeling: Robustness and Computer Intensive Methods*, Minsk, September 2004 (two lectures).
- Workshop on *Risk Analysis in Finance and Insurance*, Munich, June 2004.

- International *Gnedenko Conference*, Kyiv, June 2002.
 - 6th International School on *Mathematical and Statistical Methods in Economics, Finance and Insurance*, Laspi, Ukraine, September, 2002.
 - INTAS workshop *Incomplete Markets and Weather Derivatives*, Berlin, February 2002.
 - 3rd International workshop on *TLS and Errors-in-Variables Modeling*, Leuven, Belgium, August 2001 (two lectures).
 - Workshop *Risk in Accumulation Products*. New-York, January 1999.
- Contributed lectures* at the conferences:
- International Conference *Stochastic Equations, Limit Theorems and Statistics of Stochastic Processes* dedicated to the 100th anniversary of I.I. Gikhman. September 2018.
 - International Conference *Modern Stochastics: Theory and Applications. IV* dedicated to the 100th anniversary of I.I. Gikhman, Kyiv, May 2018.
 - 17th International Conference dedicated to the memory of Academician Kravchuk, Kyiv, May 2016.
 - Health effects of the Chornobyl accident – 30 years aftermath*, Kyiv, April 2016.
 - Differential Equations, Computational Mathematics, Function Theory, and Mathematical Methods of Mechanics*, Kyiv, April 2014.
 - 2nd EUMLS Conference *Mathematics for Life Sciences*, Olenivka, Ukraine, September 2013.
 - International workshop *Limit Theorems in Probability Theory and Asymptotic Statistics*, Uppsala, Sweden, May 2013.
 - Modern Stochastics: Theory and Applications III*, Kyiv, September 2012.
 - 6th Conference in Actuarial Science and Finance in Samos, Greece, June 2010.
 - 13th International Congress on Insurance: Mathematics and Economics, Istanbul, May 2009.
 - Workshop on Long-Range Dependence: from Calculus to Financial Applications, Kyiv, September 2009.

- Ukrainian Mathematical Congress, Kyiv, August 2009.
- International Conference *Stochastic Analysis and Random Dynamics*, Lviv, Ukraine, June 2009.
- 2008 Barcelona Conference on Asymptotic Statistics, Bellaterra, Spain, September 2008.
- International School *Finance, Insurance and Energy Markets – Sustainable Development*, Västerås, Sweden, May 2008.
- 8th International Conference *Computer Data Analysis and Modeling: Complex Stochastic Data and Systems*, Minsk, September 2007.
- International Conference *Skorokhod Space 50 Years On*, Kyiv, June 2007.
- Limit theorems and connected topics. Workshop dedicated to 60th anniversary of Prof. D.S. Silvestrov, Kyiv, February 2007.
- 2nd World Congress *Aviation in the 21st Century, Safety in Aviation*, Kyiv, September 2005.
- 25th European Meeting of Statisticians, Oslo, July 2005.
- Workshop *Numerical Methods of Statistics*, Prague, August 2004 (two lectures).
- International Conference on *Cybernetics and Information Technologies, Systems and Applications*, Orlando, Florida, USA, July 2004.
- 8th International Vilnius Conference on *Probability Theory and Mathematical Statistics*. Vilnius, Lithuania, June 2002.
- International Conference *Sensors & Systems*, Saint-Petersburg, Russia, June 2002.
- 2001 Taipei International *Quantitative Finance Conference*, Taiwan, Republic of China, July 2001.
- International School on *Mathematical and Statistical Applications in Economics*. Västerås, Sweden, January 2001.
- Conference in *Celebration of Wayne A. Fuller's 70th Birthday*. Ames, Iowa, USA, June 2001.
- German Open Conference on *Probability and Statistics*. Hamburg, March 2000.

- Workshop *Stochastic Methods in Finance, Insurance & Physics*. Munich, September 2000.
- Second International School on Actuarial and Financial Mathematics. Kyiv, June 1999.
- Conference in Balatonlelle, Hungary, on *Limit Theorems in Probability and Statistics*. June-July 1999.
- 20th International Seminar on *Stability Problems for Stochastic Models*. Lublin-Naleczow, September 1999.
- 52nd Session of *International Statistical Institute*. Helsinki, August 1999.
- 3rd Ukrainian-Scandinavian Conference on *Probability Theory and Mathematical Statistics*. Kyiv, June 1999.
- First International School on *Actuarial and Financial Mathematics*. Kyiv, January 1998.
- 7th Vilnius Conference on *Probability Theory* and 22nd *European Meeting of Statisticians*. Vilnius 1998.
- International Colloquium on *Applications of Mathematics* in memoriam Lothar Collatz. Hamburg, 1997.
- 2nd Scandinavian-Ukrainian Conference on *Mathematical Statistics*. Umea, June 1997.
- 6th International Vilnius Conference on *Probability Theory and Mathematical Statistics*. Vilnius 1993.
- International Conference on *Change Points in Random Processes and Fields*. Kyiv 1992.
- 5th International Vilnius Conference on *Probability Theory and Mathematical Statistics*. Vilnius 1989.
- International Conference *Stochastic Optimization*. Kyiv 1984.

Poster presentations at the conferences:

- Twenty-five Years after Chernobyl Accident. Safety for the Future*. Kyiv, April 2011.
- International scientific-practical conference *Hygienic Aspects of Radiation Safety Securing of Population Territories with Higher Radiation Level*, Saint-Petersburg, September 2008.

- 16th Symposium of IASC on *Computational Statistics*, Prague, August 2004 (two presentations).
- Workshop *Recent Developments and Applications in the Statistical Analysis of Discrete Structures*.
Munich, Germany, October 2001.
- International Symposium *Extreme Value Analysis: Theory and Practice*. Leuven, Belgium,
August 2001.
- International Workshop *Statistics with Deficient Data*. Munich, July 2000.

Participation in the Conference organizing

- International Gnedenko Conference, Kyiv, 2002

(Session organizer)

- International conference Functional Methods in Approximation Theory, Operator Theory, Stochastic Analysis and Statistics-II, dedicated to the memory of A.Ya. Dorogovtsev, Kyiv, 2004

(Member of Program Committee)

- International conference Modern Stochastics: Theory and Applications, dedicated to the memory of Professor M.I. Yadrenko, Kyiv, 2006

- Fourth Total Least Squares and Errors-in-Variables Modeling Workshop, Leuven, Belgium, 2006

(Member of Program Committee)

- International Conference Modern Stochastics: Theory and Applications II, Kyiv, 2010

(Member of Program Committee)

- International Conference Modern Stochastics: Theory and Applications III, Kyiv, 2012

(Member of Program Committee)

- 59th World Statistics Congress of the ISI, Hong Kong, 2013

(Session organizer)

- International Conference on Probability, Reliability and Stochastic Optimization, Kyiv, 2015

(Member of Program Committee)

- International Conference Stochastic Processes in Abstract Spaces, Kyiv, October, 2015

(Member of Program Committee)

- International Conference Modern Stochastics: Theory and Applications. IV dedicated to the 100th anniversary of I.I. Gikhman, Kyiv, 2018

(Member of Program Committee)

- International Conference Stochastic Equations, Limit Theorems and Statistics of Stochastic Processes dedicated to the 100th anniversary of I.I. Gikhman, Kyiv, 2018

(Member of Program Committee)

- International Conference Modern Stochastics: Theory and Applications. V, Kyiv, 2021

(Member of Program Committee)

Publications

Books:

1.	<i>Planimetry. Geometry on plane.</i> (Russian) “Alfa”, Minsk, 1998. 593 pp. ISBN 9986-582-54-7 (with A. Nikulin & Yu. Tatarenko)
2.	<i>Geometry 7–9. Profound course.</i> (Ukrainian) “Perun”, Kyiv, 1999. 270 pp. ISBN 966-569-085-X (with O. Nikulin)
3.	<i>Competitions of Young Mathematicians of Ukraine. Year 2003.</i> (Ukrainian) “Osnova”, Kharkiv, 2004, 120 pp. ISBN 966-02-0019-6 (with V. Borisova, V. Leifura, I. Mitelman, A. Olenko, and V. Yasinskii)
4.	<i>Theory of stochastic processes with applications to Financial Mathematics and Risk Theory.</i> Springer, NY, 2009, 380 pp. ISBN 978-0-387-87861-4 (with D. Gusak, A. Kulik, Yu. Mishura, and A. Pilipenko)
5.	<i>Radiation risk estimation: based on measurement error models.</i> De Gruyter, Berlin, 2017, 238 pp. ISBN 978-3-11-044180-2 (with S. Masiuk, S. Shklyar, M. Chepurny, and I. Likhtarov)
6.	<i>Undergraduate Mathematics Competitions (1995-2016): Taras Shevchenko National University of Kyiv.</i> Springer, NY, 2017, 228 pp. ISBN 978-3-319-58672-4

7. Gaussian Measures in Hilbert Space: Construction and Properties.

ISTE & Wiley, London & Hoboken, 2019, 243 pp.

ISBN 978-1-78630-267-0

8. Functional Analysis and Operator Theory. Springer, NY, 2024, 346 pp.

ISBN 978-3-031-56426-0

9. Problem Book on Probability Theory & Mathematical Statistics.

(Ukrainian) Published electronically 15.05.2025, 375 pp.

<https://mechmat.knu.ua/wp-content/uploads/2025/05/problem-book-18.pdf> (with V. V. Golomoziy, R. E. Maiboroda, Yu. S. Mishura, K. V. Ralchenko, M. V. Kartashov, S.V. Kushnirenko, and G.M. Shevchenko)

Papers:

1.	Optimal choice of the regime of observations in a problem of estimating the mean. (Russian). Theory of Probability & Mathematical Statistics, No. 30 (1985). - P. 39-46. (with A. Ya. Dorogovtsev)
2.	Stability theorems for sequences $\eta_{n+1} = f(\eta_n, \xi_{n+1})$ in Banach and metric spaces. (Russian) Theory of Probability & Mathematical Statistics, No. 33 (1986). - P. 47-57.
3.	Asymptotic properties of estimators of nonlinear regression in Hilbert space. (Russian) Theory of Probability & Mathematical Statistics, No. 35 (1987). - P. 25-31. (with A.Ya. Dorogovtsev & N. Zerek)
4.	Weak convergence of an estimator of an infinite-dimensional parameter to a normal distribution. (Russian) Theory of Probability & Mathematical Statistics, No. 37 (1988). - P. 45-51. (with A.Ya. Dorogovtsev & N. Zerek)
5.	Asymptotic behavior of the solution of the Cauchy problem for a stochastic equation of parabolic type. (Russian) Ukrainian Mathematical Journal, 40, No. 2 (1988). - P. 136-142. (with A.Ya. Dorogovtsev)
6.	Rate of convergence of a nonlinear regression estimator in an infinite-dimensional space in a model with dependent errors. (Russian) Theory of Probability & Mathematical Statistics, No. 38 (1989). - P. 83-88.
7.	About the probability of large deviations of an estimator

	<i>of a nonlinear regression parameter in Hilbert space.</i> (Russian) Theory of Probability & Mathematical Statistics, No. 40 (1989). - P. 51-58.
8.	<i>Convergence in distribution of a normalized projective estimate for an infinite-dimensional parameter of linear regression.</i> (Russian) Theory of Probability & Mathematical Statistics, No. 48 (1994). - P. 69-75.
9.	<i>Asymptotic normality of a projective estimator for an infinite-dimensional parameter of nonlinear regression.</i> (Russian) Ukrainian Mathematical Journal, 45, No. 9 (1994). - P. 1348-1359.
10.	<i>Bayesian theory of joint resolving, recognition, detection and estimating of the signals.</i> Radioelectronics & Communications Systems, 37, No.3 (1994). - P. 35-39. (with V. Kharchenko & G. Kosenko)
11.	<i>Convergence of multy-alternative subsequent threshold rule by correlated observations.</i> Radioelectronics & Communications Systems, 37, No.5 (1994). - P. 6-10. (with G. Kosenko & V. Kharchenko)
12.	<i>Threshold choice in multy-alternative subsequent rule for given mean risk.</i> (Radioelectronics & Communications Systems, 39, No.8 (1996). - P. 38-42. (with G. Kosenko & V. Kharchenko)
13.	<i>Asymptotic normality of estimators of the signal over observations of its nonlinear integral transformations.</i> (Russian) Theory of Stochastic Processes, 18, No.2 (1996). - P. 171-175.
14.	<i>Asymptotic properties of a nonparametric intensity estimator of a nonhomogeneous Poisson process.</i> (Russian) Cybernetics and Systems Analysis, 32, No.1 (1996). - P. 74-85. (with A. Ya. Dorogovtsev) Scopus
15.	<i>Asymptotic normality of the estimator of an infinite-dimensional parameter in the model with a smooth regression function.</i> Mathematical Methods of Statistics, 5, No.3 (1996). - P. 343-356. Scopus
16.	<i>Asymptotic properties of estimators in nonlinear functional errors-in-variables models with dependent error terms.</i> Probability Theory and Its Applications, 1997, 42, No.2 (1997). - P. 430-431. (with I. Fazekas) Scopus
17.	<i>Asymptotic properties of an estimator in nonlinear</i>

	<i>functional errors-in-variables models.</i> Computers Math. Appl., 34, No.10. - P. 23-39. (with I. Fazekas) Scopus
18.	<i>Consistency of M-estimators constructed by concave weight function.</i> (Russian) Theory of Probability & Mathematical Statistics, No. 57 (1998). - P. 11-18. (with B. Vainer)
19.	<i>Upper estimate for the decision moment in subsequent threshold multy-alternative decision rule.</i> Radioelectronics & Communications Systems, Allerton Press Inc. (USA), 1998, No.12 (1998). - P. 41 - 48. (with G. Kosenko)
20.	<i>Summation procedure for the solution of object recognition obtained from radar systems.</i> Radioelectronics and Communications Systems, No. 5 (1998). - P. 12-14. (with G. Kosenko)
21.	<i>Consistency and inconsistency of the weighted least squares estimator in linear functional errors-in-variables models.</i> Theory of Stochastic Processes, 20, No. 4. - P. 172-179. (with Yu. Martsynyuk)
22.	<i>Estimation of the error of differential methods for determination of coordinates in sputnik radar system.</i> Radioelectronics and Communications Systems, No. 7 (1999). - P. 51-54. (with G. Kosenko & G. Lazarev)
23.	<i>Asymptotic properties of estimators in nonlinear functional errors-in-variables with dependent error terms.</i> J. Math. Sci., 92, No. 3 (1998). - P. 3890-3895. (with I. Fazekas) Scopus
24.	<i>Optimal stopping strategies for American type option with discrete and continuous time.</i> Theory of Stochastic Processes, 21, No. 1-2 (1999). - P. 71-79. (with D. Silvestrov)
25.	<i>On maximum likelihood estimator in a statistical model of natural catastrophe claims.</i> Theory of Stochastic

	Processes, 21, No. 1-2 (1999). - P. 64-70.
26.	<i>Asymptotic properties in space and time of an estimator in nonlinear functional errors-in-variables models.</i> Random Operators & stochastic Equations, 7, NO. 4 (1999). - P. 379-402. (with I. Fazekas, S. Baran, and J. Lauridsen) Scopus
27.	<i>A criterion for the consistency of the least squares estimator for a functional linear model with errors in variables.</i> (Russian) Theory of Probability & Mathematical Statistics, No. 60 (1999). - P. 105-112. (with Yu. Martsynyuk)
28.	<i>Asymptotic properties of the estimator of intensity of inhomogeneous Poisson process in a combined model.</i> (Russian) Theory Prob. Appl., 44, No. 2 (2000). - P. 273-292. Scopus, Q3 (with Yu. Mishura)
29.	<i>Recognition of the objects with registration of the main tactical characteristics of radar systems.</i> Radioelectronics & Communication Systems, No.1 (2000). - P. 34-41. (with G. Kosenko)
30.	<i>On the Rosenthal inequality for mixing fields.</i> Ukrainian Math. J., 52, No. 2. - P. 305-318. (with I. Fazekas & T. Tomacs)
31.	<i>Infill asymptotics inside increasing domain for the least squares estimator in linear models.</i> Statistical Inference for Stochastic Processes, 3, No. 3 (2000). - P. 199-223. (with I. Fazekas) Scopus, Q4
32.	<i>Goodness-of-fit test in Nevzorov's model.</i> Theory of Stochastic Processes, 23, 7, No. 1-2 (2001). - P. 203-214. (with Yu. Chernikov)
33.	<i>Skeleton approximations of optimal stopping strategies for American type options with continuous time.</i> Theory of Stochastic Processes, 7, No.1-2, (2001). - P. 215-230. (with D. Silvestrov)
34.	<i>On an adaptive estimator of the least contrast in a model with nonlinear functional relations.</i> Ukrainian Math. J., 53, No. 9 (2001). - P. 1445-1452. (with S. Zwanzig)

35.	Threshold structure of optimal stopping domains for American type options. Theory of Stochastic Processes, 8, No.1-2, (2002). - P. 169-177. (with H. Jönsson & D. Silvestrov)
36.	Asymptotic properties of the estimator of intensity of inhomogeneous Poisson field. Theory of Probability & Mathematical Statistics, No. 65 (2002). - P. 97-109. (with A. Stepanishcheva)
37.	Consistent fundamental matrix estimator in a quadratic measurement error model arising in motion analysis. Computational Statistics & Data Analysis, 41, No. 1 (2002). - P. 3-18. (with I. Markovsky & S. Van Huffel) Scopus, Q3
38.	Asymptotic efficiency of statistical estimators in a combined Poisson model. Theory of Probability & Mathematical Statistics, No. 68 (2003). - P. 72-85. (with Yu. Mishura)
39.	Consistent estimation in the bilinear multivariate errors-in-variables model. Metrika, 57, No. 3 (2003). - P. 253-285. (with I. Markovsky & S. Van Huffel) Scopus, Q2
40.	The efficiency of adjusted least squares in the linear functional relationship. J. of Multivariate Analysis, 87, No. 2 (2003). - P. 261-274. (with E.-O. Maschke) Scopus, Q2
41.	Goodness-of-fit test in a polynomial errors-in-variables model. Ukrainian Math. J., 56, No. 4 (2004). - P. 527-543. (with C.-L. Cheng)
42.	Consistency of element-wise weighted total least squares estimator in a multivariate errors-in-variables model $AX=B$. Metrika, 59, No. 1 (2004). - P. 75-97. (with S. Van Huffel) Scopus, Q2
43.	Optimal pricing for American type options with discrete time. Theory of Stochastic Processes, 10, No.1-2, (2004). - P. 72-96. (with D. Silvestrov)
44.	Three estimators for the Poisson regression model with measurement errors. Statistical Papers, 45, No. 3 (2004). - P. 351-368. (with H. Schneeweiss & R. Wolf) Scopus, Q4
45.	On the computation of the structured total least squares estimator. Numerical Linear Algebra with Applications, No. 11 (2004). - P. 591-608. (with I. Markovsky & S. Van Huffel) Scopus, Q2

46.	Consistent least squares fitting of ellipsoids. Numerische Mathematik, 98, No. 1 (2004). - P. 177-194. . (with I. Markovsky & S. Van Huffel) Scopus, Q1
47.	Consistent estimation in an implicit quadratic measurement error model. Computational Statistics & Data Analysis, 47, No. 1 (2004). - P. 123-147. . (with I. Markovsky & S. Van Huffel) Scopus, Q2
48.	A note on matrix inequality for generalized means. Linear Algebra and Its applications, No. 388C (2004). - P. 289-294. (with H. Schneeweiss) Scopus, Q3
49.	Correction of nonlinear orthogonal regression estimator. Ukrainian Math. J., 56, No. 8 (2004). - P. 1101-1118. (with I. Fazekas & S. Zwanzig)
50.	Threshold structure of optimal stopping strategies for American type option. I. Theory of Probability & Mathematical Statistics, No. 71 (2004). - P. 113-123. (with H.Jönsson & D. Silvestrov)
51.	Threshold structure of optimal stopping strategies for American type option. II. Theory of Probability & Mathematical Statistics, No. 72 (2005). - P. 42-53. (with H.Jönsson & D. Silvestrov)
52.	Maximum likelihood estimators in a statistical model of natural catastrophe claims with trend. Extremes, 7, No. 4 (2004). - P. 309-337. (with Yu. Chernikov & D. Pfeifer) Scopus, Q4
53.	Relative efficiency of three estimators in a polynomial regression with measurement errors. J. of statistical Planning & Inference, 127, No. 1-2 (2005). - P. 179-203. (with H. Schneeweiss & R. Wolf) Scopus, Q2
54.	Statistical inference with fractional Brownian motion. Statistical Inference for Stochastic Processes, 8, No. 1 (2005). - P. 71-93. (with Yu. Mishura & E. Valkeila) Scopus, Q4
55.	Methods of conflict probability evaluation for air traffic management system. Control Problems & Informatics, No. 1 (2005). - P. 88-97. (with V. Kharchenko & V. Vasylyev)
56.	Consistency of the structured total least squares estimator in a multivariate errors-in-variables model. J. of Statistical Planning & Inference, 133, No. 2 (2005). - P. 315-358. (with I. Markovsky & S. Van Huffel) Scopus, Q2

57.	Comparing different estimators in a nonlinear measurement error model. I. Mathematical Methods of Statistics, 14, No. 1 (2005). - P. 53-79. (with H. Schneeweiss) Scopus, Q4
58.	Comparing different estimators in a nonlinear measurement error model. II. Mathematical Methods of Statistics, 14, No. 2 (2005). - P. 203-223. (with H. Schneeweiss) Scopus, Q4
59.	Kriging and prediction of nonlinear functionals. Austrian J. of Statistics, 34, No. 2 (2005). - P. 175-184. (with I. Fazekas) Scopus, Q4
60.	A generalized stochastic method for estimating the characteristics of potential conflicts of a controlled air traffic. Cybernetics & Systems Analysis, 41, No. 3 (2005). - P. 385-396. (with V. Kharchenko & V. Vasylyev)
61.	Stochastic evaluation of aircraft collision risk at cooperative air traffic control. Control Problems & Informatics, No. 5 (2005). - P. 56-63. (with V. Kharchenko & V. Vasylyev)
62.	Kriging and measurement errors. Discussiones Mathematicae – Probability and Statistics, 25 (2005). - P. 139-159. (with I. Fazekas)
63.	The element-wise weighted total least squares problem. Computational Statistics & Data Analysis, 50, No. 1 (2006). - P. 181-209. (with I. Markovsky, M.-L. Rastello, A. Premoli, and S. Van Huffel) Scopus, Q2
64.	Non-existence of the first moment of the adjusted least squares estimator in multivariate errors-in-variables model. Metrika, 64, No. 1 (2006). - P. 41-46. (with C.-L. Cheng) Scopus, Q2
65.	On modeling of rare events. Cybernetics & Systems Analysis, 42, No. 1 (2006). - P. 76-85. (with V. Kharchenko, S. Nagaev, E. Znakovska, and S. Docenko)
66.	On reselling of European options. Theory of Stochastic Processes, 12, no. 3-4 (2006). - P. 80-93. (with Yu. Mishura & G. Shevchenko)
67.	A goodness-of-fit test for a multivariate errors-in-variables model. Theory of Stochastic Processes, 12, No. 3-4 (2006). - P. 67-79. (with M. Polekha)

68.	<i>On the structure of premium principle under point-wise comonotonicity.</i> Theory of Stochastic Processes, 12, No. 3-4 (2006). - P. 27-45. (with J. Dhaene & M. Pupashenko)
69.	<i>Quasi Score is more efficient than Corrected Score in a polynomial measurement error model.</i> Metrika, 65, No. 3 (2007)/ - P. 275-295. (with S. Shklyar & H/ Schneeweiss) Scopus, Q3
70.	<i>On the conic section fitting problem.</i> J. of Multivariate Analysis, 98, No. 3 (2007). - P. 588-624. (with S. Shklyar, I. Markovsky, and S. Van Huffel) Scopus, Q2
71.	<i>On the problem of estimation of probability of airplanes closing in: conditions of applicability and reducing of dimension of generalized method.</i> Control Problems & Informatics, No. 3 (2007). - P. 64-71. (with V. Kharchenko & V. Vasylyev)
72.	<i>Editorial Total Least Squares & Errors-In-Variables Modeling.</i> Computational Statistics & Data Analysis, 52, No. 2 (2007). - P. 1100-1103. (with S. Van Huffel, C/-L. Cheng, N. Mastronardi, and C. Page) Scopus Q2
73.	<i>Estimation in a linear multivariate measurement error model with a change point in the data.</i> Computational Statistics & Data Analysis, 52, No. 2 (2007). - P. 1167-1182. (with I. Markovsky & S. Van Huffel) Scopus Q2
74.	<i>Consistent estimator in multivariate errors-in-variables model under unknown error covariance structure.</i> Ukrainian Math. J., 59, No. 8 (2007). - P. 1026-1033.
75.	<i>On probability of correct recognition in case of imprecise densities.</i> Radioelectronics & Communication Systems, 50, No. 11 (2007). - P. 60-67. (with I. Ostroumov & V. Kharchenko)
76.	<i>Bounds for a sum of random variabkes under a mixture of normals.</i> Theory of Stochastic Processes, 13, No. 4 (2007). - P. 82-97. (with M. Pupashenko)
77.	<i>Comparing the efficiency of estimates in concrete errors-in-variables models under unknown nuisance parameters.</i> Theory of Stochastic Processes, 13, No. 4 (2007). - P. 69-81. (with A. Malenko & H. Schneeweiss)
78.	<i>Goodness-of-fit test in a structural errors-in-variables model based on a score function.</i> Austrian J. of Statistics, 37, No. 1 (2008). - P. 71-79. (with A. Malenko) Scopus, Q4

79.	<i>Optimal joint estimator of regression parameter and dispersion in nonlinear errors-in-variables models.</i> Theory of Probability & Math. Statistics, No. 78 (2008). - P. 141-150. (with A. Malenko)
80.	<i>Reselling of options and convergence of option rewards.</i> J. Numer. Appl. Math, No. 1 (2008). - P. 149-172. (with R. Lundgren & D. Silvestrov)
81.	<i>Optimality of CS estimators in nonlinear errors-in-variables model when nonintercept terms are small.</i> J. Numer. Appl. Math, No. 1 (2008). - P. 139-148. (with E. Usoltseva)
82.	<i>Reselling of European option if the implied volatility varies as Cox-Ingersoll-Ross process.</i> Theory of Stochastic Processes, 14, No. 3-4. - P. 114-128. (with M. Pupashenko)
83.	<i>Inference of dose uncertainty on radiation risk estimate.</i> (Russian) Radiation & Risk Bulletin of the National Radiation & Epidemiological Registry, 17, No. 3. - P. 64-75. (with S. Masiuk, S. Vavilov, and S. Shklyar)
84.	<i>Comparing the efficiency of structural and functional methods in measurement error models.</i> Theory of Probability & Math. Statistics, No. 80 (2009). - P. 117-127. (with H. Schneeweiss)
85.	<i>Optimality of the quasi score estimator in a mean-variance model with application to measurement error models.</i> J. of Statistical Planning & Inference, 139, No. 10 (2009). - P. 3461-3472. (with A. Malenko & H. Schneeweiss) Scopus, Q2
86.	<i>Optimality of Quasi-Score in the multivariate mean-variance model with application to zero-inflated Poisson model with measurement errors.</i> Statistics, 44, No. 4 (2010). - P. 381-396. (with A. Malenko, H. Schneeweiss, and Shalabh) Scopus, Q2
87.	<i>New functional estimator in quadratic errors-in-variables model.</i> Theory of Stochastic Processes, 16, No. 2 (2010). - P. 126-131. (with E. Usoltseva) Scopus, Q4
88.	<i>Measurement error models.</i> In: International Encyclopedia of Statistical Science. Ed. M. Lovric, Springer (2011). - P. 795-798; (2025). - P. 1437-1441.
89.	<i>Methods for estimation of radiation risk in</i>

	<i>epidemiological studies accounting for classical and Berkson errors in doses.</i> The International Journal of Biostatistics, 7, No.1, Article 15 (2011). (with S.Shklyar, S. Masiuk, I. Likhtarov, L. Kovgan, A. Bouville, and R. Carroll) Scopus, Q1
90.	<i>Simultaneous estimation of baseline hazard rate and regression parameters in Cox proportional hazards model with measurement error.</i> Journal of Statistical Research, 45, No.2 (2011). - P. 77-94. (with S. Baran, I. Fazekas, and E. Usoltseva) Scopus
91.	<i>Remarks on quantiles and distortion risk measures.</i> European Actuarial Journal, 2, No.2 (2012). - P. 319-328. (with J. Dhaene, D. Linders, and Q. Tang) Scopus, Q2
92.	<i>On the (in)-dependence between financial and actuarial risks.</i> Insurance: Mathematics & Economics, 52, no. 3 (2013). - P. 522-531. (with J. Dhaene, E. Luciano, W. Schoutens, and B. Stassen) Scopus, Q2
93.	<i>The multivariate Black & Scholes market: conditions for completeness and no-arbitrage.</i> Theory of Probability & Math. Statistics, No. 88 (2013). - P. 76-89. (with J.Dhaene & D. Linders) Scopus, Q4
94.	<i>Asymptotic properties of Corrected Score estimator in autoregressive model with measurement errors.</i> Theory of Probability & Math. Statistics, No. 89 (2013). - P. 156-166. (with D. Pupashenko & S. Shklyar) Scopus Q4
95.	<i>Impact of uncertainties in exposure assessment on thyroid cancer risk among Ukrainian children and adolescents exposed from the Chernobyl accident.</i> PLOS ONE, 9, No.1, e85723. (2014). - P.1-9. Supporting information contains Appendix (11 pp.) and figures. (with M. Little, S. Masiuk, S. Shklyar, R. Carroll, J. Lubin, D. Kwon, A. Brenner, M. Tronko, K. Mabuchi, T. Bogdanova, M. Hatch, L. Zablotska, V. Tereschenko, E. Ostroumova, A. Bouville, V. Drozdovitch, M. Chepurny, L. Kovgan, S. Simon, V. Shpak, V.M., and I. Likhtarev) Scopus, Q1
96.	<i>Asymptotic normality of corrected estimator in Cox proportional hazards model with measurement error.</i> Modern Stochastics: Theory and Applications, 1, No. 1 (2014). - P. 13-32. (with C. Chimisov) Scopus

97.	<i>Ordered random vectors and equality in distribution.</i> Scandinavian Actuarial Journal, No. 3 (2015). - P. 221-244. (with K. Cheung, J. Dhaene, and D. Linders) Scopus, Q2
98.	<i>Convergence of estimators in the polynomial measurement error model.</i> Theory of Probability and Math. Statistics, No. 92 (2016). - P. 81-91. (with Ya.Tsaregorodtsev) Scopus, Q4
99.	<i>Estimation of radiation risk in presence of classical additive error in exposure doses.</i> Biostatistics, no. 17 (2016). - P. 422–436. (with S. Masiuk, S. Shklyar, R. Carroll, L. Kovgan, and I. Likhtarev) Scopus. Q1
100.	<i>Asymptotic normality of total least squares estimator in a multivariate errors-in-variables model $AX=B$.</i> Modern Stochastics: Theory and Applications, 3, No. 1 (2016). - P. 47-57. Scopus
101.	<i>Asymptotically independent estimates in a structural linear model with measurement errors.</i> Ukrainian Math. J., 68, No. 11 (2017). - P. 1741-1755. (with Ya. Tsaregorodtsev & S. Shklyar) Scopus, Q4
102.	<i>Goodness-of-fit test in a multivariate errors-in-variables model $AX=B$.</i> Modern Stochastics: Theory and Applications, 3, No. 4 (2016). - P. 287-302. (with Ya. Tsaregorodtsev) Scopus
103.	<i>Hypothesis testing of the drift parameter sign for fractional Ornstein-Uhlenbeck process.</i> Electronic Journal of Statistics, 11, No. 1 (2017). - P. 385-400. (with Yu. Mishura, and K. Ralchenko) Scopus, Q1
104.	<i>Consistent estimation in the Cox model with proportional risks, measurement errors, and unbounded set of parameters.</i> Theory of Probability and Math. Statistics, No. 96 (2018). – P. 101-110. (with O. Chernova) Scopus, Q4
105.	<i>Consistency of the orthogonal regression estimator in an implicit linear model with errors in variables.</i> Theory of Probability and Math. Statistics, No. 97 (2018). - P. 45-55. (with O. Dashkov) Scopus, Q4
106.	<i>Measurement error in exposure doses and cancer risk estimation.</i> Biostat. Biometrics Open Access J. 4, No.4 (2018). - P. 555-643. (with S. Masiuk & S. Shklyar)
107.	<i>Confidence regions in Cox proportional hazards model with measurement errors and unbounded parameter set.</i>

	Modern Stochastics: Theory and Applications, 5, No. 1 (2018). - P. 37-52. (with O. Chernova) Scopus, Q2
108.	Goodness-of-fit test in the Cox proportional hazards model with measurement errors. Theory of Probability and Math. Statistics, 99, No. 2 (2019). - P.125-135. (with O. Chernova) Scopus, Q4
109.	Unmanned aerial vehicles trajectory analysis considering missing data. Transport, 34, No. 2 (2019). - P. 155-162. (with Bo Wang, V. Kharchenko, and N. Kuzmenko) Scopus, Q2
110.	Editorial. Theory of Probability and Math. Statistics, 100, No. 1 (2019). - P. 5-6. (with Yu. Kozachenko & R. Maiboroda) Scopus, Q4
111.	Testing linear and nonlinear hypotheses in a Cox proportional hazards model with errors in covariates. Lithuanian Journal of Statistics, 58, No. 1 (2019). P. 39-47. (with O. Chernova) Scopus
112.	Comonotonic asset prices in arbitrage-free markets. Journal of Computational and Applied Mathematics, 364, issue C (2020). P. 112310. (with J. Dhaene & D. Linders) Scopus, Q2 https://doi.org/10.1016/j.cam.2019.06.026
113.	Prediction in polynomial errors-in-variables models. Modern Stochastics: Theory and Applications, 7, No. 2 (2020). - P. 203-219. (with I. Senko) Scopus, Q2
114.	Thyroid doses in the Ukrainian - American cohort of children exposed to the Chernobyl fallout. Report I: Revision of measurements of ¹³¹I thyroidal activity. Radiation and Environmental Biophysics, 2021, 60, No. 2 (2021). - P. 267-288. (with S. Masiuk, M. Chepurny, V. Buderatska, S. Shklyar, O. Ivanova, Z. Boiko, N. Zhadan, G. Fedosenko, S. Kutsen, V. Minenko, K. Viarenich, and V. Drozdovitch) Scopus, Q2
115.	Estimation in a linear errors-in-variables model under a mixture of classical and Berkson errors. Modern Stochastics: Theory and Applications, 8, No. 3 (2021). - P. 373-386. (with M. Yakovliev) Scopus, Q2
116.	Thyroid doses in Ukraine due to ¹³¹I intake after the Chernobyl accident. Report II: dose estimates for the Ukrainian population. Radiation and Environmental Biophysics, no. 60 (2021). - P. 591–609. (with S. Masiuk, M.

Chepurny, V. Buderatska, O. Ivanova, Z. Boiko, N. Zhadan, G. Fedosenko, A. Bilonyk, T. Lev, M. Talerko, and V. Drozdovitch) Scopus, Q2

117. *Bias correction for Vandermonde low-rank approximation.*

Econometrics and Statistics, Part A: Econometrics. Published online (2021).

(with A. Fazzi & I. Markovsky) Scopus, Q2

<https://doi.org/10.1016/j.ecosta.2021.09.001>

118. *Two approaches to consistent estimation of parameters of mixed fractional Brownian motion with trend.*

Statistical Inference for Stochastic Processes, 25, No.1 (2022). - P. 159-187. (with S. Lohvinenko, Yu. Mishura, and K. Ralchenko) Scopus, Q2 <https://doi.org/10.1007/s11203-021-09252-6>

119. *Exposure to the Thyroid from Intake of Radioiodine Isotopes after the Chernobyl Accident. Report I: Revised Doses and Associated Uncertainties for the Ukrainian-American Cohort.*

Radiat. Res. 2023; 199(1):61-73. (with Masiuk S, Chepurny M, Buderatska V, Ivanova O, Boiko Z, Zhadan N, Mabuchi K, Cahoon EK, Little MP, Bogdanova T, Shpak V, Zamotayeva G, Tronko M, Drozdovitch V.) Scopus, Q1 <https://doi.org/10.1667/RADE-21-00152.1>

120. *A validity test for a multivariate linear measurement error model.*

Model Assisted Statistics and Applications, 2024, 19, No.1 (2024). - P. 97-115. (with I. Mandel) Scopus, Q4 <https://doi.org/10.3233/MAS-231494>