

CURRICULUM VITAE
VASILIEV Vyacheslav A.

Born: October 10, 1958, in Tomsk (Russia)

Nationality: Russian

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Math. and Cybern., for Prof. Vasiliev V.A.")

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Academic degree:

Candidate of science (PhD) department of High Mathematics and Mathematical Modelling, Tomsk State University, Tomsk, Russia, 09.12.1987, FM N 030110.

Doctor of Science department of High Mathematics and Mathematical Modelling, Tomsk State University, Tomsk, Russia, 15.05.1998, DK N 011653.

Academic status:

Diploma of Professor given by High Educational Department of Russia Federation, 17.05.2000, PR N 001654.

Other degrees:

Medal "For achievements for Tomsk State University" given by Tomsk State University, Tomsk, Russia, 01.06.1998, N 89.

Science and Education area Laureate, Tomsk, Russia, 1998.

EDUCATION AND DEGREE

- 1980** graduated from Department of Applied Mathematics and Cybernetics, Tomsk State University, Certificate of degree A-I N 411148, 31.05.80;
- 1985-1987** postgraduate student at the Department of Applied Mathematics and Cybernetics of Tomsk State University, supervisor Prof.V.Konev;
- 1987** candidate physico-mathematiceskih nauk (Ph.D.) in the area of Application of Computer Science, Mathematical Modeling and Mathematical Methods in Scientific Investigations;
- Instructor - Prof. V.V.Konev, Tomsk State University, Russia
- Principal management: Minsk State University
- Opponents:
- Doctor of Science Dobrovidov A.V., Institute of Problems of Control, Moscow
- President of Council - Prof. Makushkin Yu.S., Rector of Tomsk State University
- 1993** was awarded the rank of docent, Certificate DC N 001527, 14.07.93;
- 1994-1997** postdoctoral researcher at the Department of Applied Mathematics and Cybernetics of Tomsk State University, adviser Prof. V.Konev;
- 1997** doctor physico-mathematiceskih nauk (Dr.Sci.) in the area of Application of Computer Science, Mathematical Modeling and Mathematical Methods in Scientific Investigations, obtained in Department of Applied Mathematics and Cybernetics, Tomsk State University, Tomsk.
- 2000** was awarded the rank of professor.

THESES

Ph.D. thesis

Defend at 17.06.1987 in Tomsk State University, Russia

”Sequential Estimation of Parameters and Statistical Characteristics of the Noises in Linear Dynamic Systems by Noisy Observations”

Instructor - Prof. V.V.Konev, Tomsk State University, Russia

Principal management: Leningrad State University, Russia

Opponents:

Professor Medvedev G.A., Department of Applied Mathematics and Cybernetics, Minsk State University, Minsk.

Docent Poddubnyi V.V., Department of Applied Mathematics and Cybernetics, Tomsk State University, Tomsk.

President of Council - Prof. Makushkin Yu., Rector of Tomsk State University

Doctoral thesis

”Nonparametric Identification of Linear Dynamic Systems by Noisy Observations”

Defend at 25.12.1997 in Tomsk State University, Russia

Principal management: Minsk State University

Opponents:

Doctor of Science Dobrovidov A.V., Institute of Problems of Control, Moscow

Professor Ruban A.I., Krasnoyarsk University

Professor Poddubnyi V.V., Department of Applied Mathematics and Cybernetics, Tomsk State University, Tomsk

President of Council - Prof. Makushkin Yu., Rector of Tomsk State University

LANGUAGES

Russian (native); English and German (aktive)

EMPLOYMENT

- 1980 - 1982** Sub-Unit Second in Command, Lieutenant, KVO (Military Building Service Unit), Kirovograd (no other address details available)
- 1982 - 1991** research fellow at the Siberian Physico-Technical Institute, 1 Novosobornaya Square, Tomsk 634050 Russia, Tel. 7-3822-233577;
- 1991 - 1992** docent at the Department of Applied Mathematics and Cybernetics of Tomsk State University, 36 Lenin str., Tomsk 634050 Russia, Tel. 7-3822-529599;
- 1992 - 1998** professor at the Department of Applied Mathematics and Cybernetics of Tomsk State University, 36 Lenin str., Tomsk 634050 Russia, Tel. 7-3822-529599;
- from 1998 to date** full professor at the Department of Applied Mathematics and Cybernetics of Tomsk State University, 36 Lenin str., Tomsk 634050 Russia, Tel. 7-3822-529599.

VISITION POSITION

- 1997-2010** visiting at Humboldt-University (Berlin, Germany)
- 2007, 2010, 2011** visiting at University of California in San Diego (San Diego, USA)
- 2007** visiting at GlaxoSmithKline (Philadelphia, USA)
- 2010** visiting at University of Rouen (Rouen, France)

TALKS ON CONFERENCES, CONGRESSES AND SEMINARS

1. International Vilnius Conference on Probability Theory and Mathematical Statistics (Vilnius, Lithuania, 1985)
2. 2-nd IFAC Symposium (Vilnius, Lithuania, 1986)
3. 11th IFAC World Congress (Tallinn, Estonia, 1990)
4. 15th IMACS World Congress (Berlin, Germany, 1997)
5. "Scientific seminar on controlled retarded systems", Dept. of Cybernetics, Moscow State Inst. of Electronics and Mathematics (Moscow, 1997)
6. "Scientific seminar", Institute of Problems of Information Transmission (under the head of B.Miller, Moscow, 1997)
7. Seminar on the Department of Stochastics and Financial mathematics, Humboldt University (Berlin, Germany, 1997, 1999, 2000, 2002, 2004, 2006, 2008, 2010)
8. German Open Conference on Probability and Statistics (Magdeburg, Germany, 2002)
9. 15th IFAC World Congress (Barcelona, Spain, 2002)
10. 13th IFAC Symposium (Rotterdam, Holland, 2003)
11. Seminar in Statistics of University of Rouen (Rouen, France, 2007)
12. Seminar in Statistics of University of California in San Diego (San Diego, USA, 2007)
13. Seminar of Research Statistics Unit, GlaxoSmithKline (Philadelphia, USA, 2007)
14. Seminar in Statistics of University of Strasbourg (Strasbourg, France, 2007)
15. 17th IFAC World Congress (Seoul, South Korea, 2008)

16. 15th IFAC Symposium SYSID'09 (Saint Malo, France, 2009)
17. Workshop "RMR-2010", University of Rouen (Rouen, France, 2010)
18. 18th IFAC World Congress (Milano, Italy, 2011)

PROSPECTS

19. Workshop "RMR-2012", University of Rouen (Rouen, France, 2012) (invited speaker)
20. First Conference of International Society for NonParametric Statistics (ISNPS) (Chalkidiki, Greece, 2012) (Organizer of the invited speaker session "Adaptive problems in nonparametric statistics")
21. 16th IFAC Symposium SYSID'12 (Brussels, Belgium, 2012) (submitted)

LIST OF COURSES TAUGHT

1. Mathematical foundations of probability theory (Department of Applied Mathematics and Cybernetics, Tomsk University)
2. Higher mathematics (Economics Department, Tomsk University)
3. Mathematical statistics (Department of Applied Mathematics and Cybernetics, Tomsk University)
4. Data Analysis (Department of Applied Mathematics and Cybernetics, Tomsk University)
5. Mathematical analysis (Department of Chemistry, Tomsk University)
6. Identification (Department of Applied Mathematics and Cybernetics, Tomsk University)
7. Sequential analysis (Department of Applied Mathematics and Cybernetics, Tomsk University)

8. Equations of mathematical physics (Department of Applied Mathematics and Cybernetics, Tomsk University)
9. Econometrics modelling (Department of Applied Mathematics and Cybernetics, Tomsk University)

GRANTS:

- 1995** grant 95-01-00409 (director Professor V.V.Konev) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334)
- 1996** grant 96-01-00189 (director Professor V.V.Konev) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334)
- 1997** individual grant 97-01-10734 by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334)
- 1998** grant 98-01-00296 (director Docent G.M.Koshkin) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334)
- 1998** grant 98-01-00298 (director Professor V.V.Konev) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334)
- 2000** grant 00-01-00880 (director Professor V.V.Konev) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334)
- 2002** grant 02-01-04001 (directors Professor V.Konakov and Professor E.Mammen) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334) and Deutsche Forschungsgemeinschaft (Heidelberg University)
- 2004** grant 04-01-00855 (director Professor V.V.Konev) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334)
- 2006** grant 05-01-04004 (directors Professor V.Konakov and Professor E.Mammen) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334) and Deutsche Forschungsgemeinschaft (Heidelberg University)

- 2009** grant 09-01-00172 (director Professor V.V.Konev) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334)
- 2009** state contract 02.740.11.5026 (Meropriyatue 1.5., director Professor S.M. Pergamenshchikov) by Russian Federal Agency on Science and Education
- 2010** grant 10-01-91330 (directors Professor V.Konakov and Professor E.Mammen) by Russian Fond of Fundamental Investigation (Leninskii prospekt 32/a, Moscow 117334) and Deutsche Forschungsgemeinschaft (Heidelberg University)

REFERENCES:

- Victor V. Konev** Tomsk State University,
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- Serge Pergamenshchikov** Laboratoire de Mathématiques Raphaël Salem,
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- Dimitris Politis** University of California in San Diego,
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- Uwe Küchler** Humboldt-University of Berlin,
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LIST OF MAIN PUBLICATIONS OF V.A.VASILIEV

PAPERS

1. (with V.V.Konev) The Sequential Parameters Estimation of Dynamic Systems with Noisy Observations. - Izvestia Acad. USSR, Technical Cybernetics, 6, 1982, pp.145-154.
2. (with V.V.Konev) The Sequential Parameter Identification of the Dynamic Systems in the Presence of Multiplicative and Additive Noises in Observations. - Automat. and Remote Control, 1985, 6, pp. 33-43.
3. On Estimation of Disturbance Distributions of Autoregressive Processes. - Math. Statist. and Appl., Tomsk Publishing House, Tomsk, 1986, vol.10, pp.9-24.
4. (with V.V.Konev) On Guaranteed Accuracy of the Parameters of Diffusion Processes by Noisy Observations.- Math. Stat. and Appl., Publishing House of Tomsk University, Tomsk, 1986, 10, pp. 25-30.
5. (with V.V.Konev) On Estimation of the Drift of Parameters in Dynamic Systems by Noisy Observations. - Math. Stat. and Appl., Publishing House of Tomsk University, Tomsk, 1987, 11, pp. 13-23.
6. (with Konev V.V.) On Identification of Linear Dynamic Systems in the Presence of Multiplicative and Additive Noises in Observations. - Stochastic Contr.: Proc. 2-nd IFAC Symp., Vilnius, May 19-23, 1986, Oxford e.a., 1987, p. 87-91.
7. (with Konev V.V.) Sequential Identification of Linear Dynamic Systems in Continuous Time by Noisy Observations. - Problems of Control and Information Theory, 1987, 16, N 2, p. 112-120.

8. (with V.V. Konev) On Sequential Parameter Estimation of Continuous Dynamic Systems by Discrete Time Observations. - Problems of Control and Information Theory, 1990, 19, N 3, p. 197-207.
9. (with V.V. Konev) Fixed Accuracy Identification of Partly Observable Dynamic Systems. - Autom. Contr.: Proc. 11th Trienn. World Congr. Int. Fed. Autom. Contr., Tallinn, 13-17 Aug., 1990, v.2 - Oxford etc., 1991, p.179-183.
10. Nonparametric Estimation of Functionals on Observations with Additive Dependent Noise Provided that Additional Apriori Information is Available. - Russian Physics Journal, 1995, vol.38, N 9, pp.877-883.
11. (with Koshkin G.M.) On Identification of Linear Dynamic Systems with Unknown Noise Distributions. - 35th IEEE Conference on Decision and Control, Kobe, Japan, December 11-13, 1996.
12. On Identification of Dynamic Systems of Autoregressive Type. - Automat. and Remote Control, 1997, N 12, p.106-118.
13. (with G.M. Koshkin) Estimation of the Limiting Probability Density and their Derivatives by Observations with Vanishing Dependence. - Problems of Inform. Trans., 1997, N 2, p.66-80.
14. (with G.M. Koshkin) Estimation of Functions of Distribution Density based on Dependent Observations. - Problems of Inform. Trans., 1997, N 4, p.45-60.
15. (with V.V. Konev) On Optimal Adaptive Control of a Linear Stochastic Process. - Proc.15th IMACS World Congress on Scientific Computation, Modelling and Applied Mathematics, August 24-29, 1997, Berlin, Germany, v.5, p.87-91.
16. (with G.M. Koshkin) Estimation of Multivariate Probability Density and its Derivatives by Weakly Dependent Observations. - Proc. of Steklov Mathematical Institute Seminar "Statistics and Control of Stochastic Processes", The Liptser Festshrift, Steklov Mathematical Institute, 1995-1996, Editors Yu.M.Kabanov, B.L.Rozovskii, A.N.Shiryayev. World Scientific, Singapore, New Jersey, London, Hong Kong, 1997, p.229-241.

17. Bounds for the Mean Time of Sequential Estimation of Autoregression Parameters by Noisy Observations. - Informatics and Control Processes., Publishing House of Krasnoyarsk State Techn. University, Krasnoyarsk, 1997, p. 28-35.
18. (with G.M. Koshkin) Nonparametric Identification of Autoregression. - Probability Theory and Its Applications, 1998, v.43, N3, p.577-588.
19. (with G.M. Koshkin) Nonparametric Estimation of Derivatives of a Multivariate Density from Dependent Observations. - Mathematical Methods of Statistics, New York, 1998, v.7, N4, p.361-400.
20. (with U. Küchler) On sequential parameter estimation for some linear stochastic differential equations with time delay. - Sonderforschungsbereich 373, Humboldt-Universität zu Berlin, Discussion Paper 93, 1998, pp. 1-13.
21. (with G.M. Koshkin) Nonparametric Estimation of Difference of Derivatives of a Multivariate Distribution Density from Dependent Observations. - Siberian Mathematical Journal, 2000, v.41, N2, p.229-245.
22. (with U. Küchler) On sequential parameter estimation for some linear stochastic differential equations with time delay. - Sequential Analysis, 2001, v.20, N3, p.117-146.
23. (with G.M. Koshkin) Nonparametric Ratio Estimation of a Multivariate Density Derivatives from Dependent Observations. - Proc. 15th Trienn. World Congr. Int. Fed. Autom. Contr., Barcelona, Spain, 21-26 July, 2002, Paper N170.
24. (with U. Küchler) On sequential identification of a diffusion type process with memory. - Proc. Symp. Int. Fed. Autom. Contr. SYSID-2003, Rotterdam, Holland, 27-29 August, 2003, CD, 1217-1221.
25. (with U. Küchler) Sequential identification of linear dynamic systems with memory. Statist. Inference for Stochastic Processes, Springer, 2005, 8(1), 1-24.

26. (with U. Küchler) On parameter estimation of stochastic delay differential equations with guaranteed accuracy by noisy observations, Preprint of the Math. Inst. of Humboldt University, Berlin, pages 1–24, 2005.
27. (with U. Küchler) On Sequential Estimation for Affine Stochastic Delay Differential Equations. 'Algorithms for Approximations', Proceedings of the 5th International Conference, Chester, July 2005, A.Iske, J.Levesley, Editors, Springer-Verlag, Berlin Heidelberg, 2006, pp. 287-296.
28. (with U. Küchler) On parameter estimation of stochastic delay differential equations with guaranteed accuracy by noisy observations, Journal of Statistical Planning and Inference. Elsevier Science, 137, 3007-3023, 2007, doi: 10/1016j.jspi.2006.12.001.
29. (with A. Malyarenko) On Guaranteed Parameter Estimation of Discrete-Time Stochastic Systems. Tomsk State Univ., Tomsk; This paper appears in: *Innovative Computing, Information and Control, 2007. ICICIC '07. Second International Conference on*;[http://ieeexplore.ieee.org/xpl/RecentCon.jsp? punumber=4427646](http://ieeexplore.ieee.org/xpl/RecentCon.jsp?punumber=4427646); Publication Date: 5-7 Sept. 2007 On page(s): 140-140 Location: Kumamoto, ISBN: 0-7695-2882-1 INSPEC Accession Number: 9893517 Digital Object Identifier: 10.1109/ICICIC.2007.417 Current Version Published: 2008-01-14.
30. Non-parametric adaptive estimation of a multivariate density. Proceedings of the 17th World Congress The Int. Fed. Autom. Contr., Seoul, Korea, 6-11 July, pages 12436–12441, 2008.
31. (with U.Küchler) On sequential parameter estimation of a linear regression process. Proceedings of the 17th World Congress The Int. Fed. Autom. Contr., Seoul, Korea, 6-11 July, pages 10230–10235, 2008.
32. (with Valerii V. Fedorov and Sergei L. Leonov) Pharmacokinetic Studies Described by Stochastic Differential Equations: Optimal Design for Systems with Positive Trajectories. Contributions to Statistics, 2010, mODa 9 - Advances in Model-Oriented Design and Analysis, pp. 73-80.
33. (with A. Malyarenko) On Sequential Parameter Estimation Problem of Nonlinear Discrete-Time Stochastic Systems. Innovative Computing

Information and Control, 2008. ICICIC '08. 3rd International Conference on Publication Date: 18-20 June 2008, pages: 552-552, Location: Dalian, Liaoning, ISBN: 978-0-7695-3161-8 INSPEC Accession Number: 10184571, Digital Object Identifier: 10.1109/ICICIC.2008.399. Current Version Published: 2008-08-22.

34. (with V.V.Konev and S.M.Pergamentshchikov) Gilbert-Schmidt theorem. Karhunen-Loeve expansion. Manual on the course "Equations of mathematical physics". 2008. p. 1–24.
35. (with U. Kuchler) On guaranteed parameter estimation of a multiparameter linear regression process, Preprint 7 of the Math. Inst. of Humboldt University, Berlin, pages 1–60, 2009.
36. (with U. Kuchler) On sequential parameter estimation of stochastic delay differential equations by noisy observations. Preprints of the 15th IFAC Symposium on System Identification, Saint-Malo, France, July 6-8, pages 892–897, 2009.
37. (with U. Kuchler) On guaranteed parameter estimation of a multiparameter linear regression process. Automatica, Journal of IFAC, Elsevier, 46, pages 637-646, 2010.
38. (with Valerii V. Fedorov and Sergei L. Leonov) Pharmacokinetic Studies Described by Stochastic Differential Equations: Optimal Design for SDE Systems with Positive Trajectories, PAGE-2010, pages 1-10.
39. (with U. Kuchler) On adaptive control problems of continuous-time stochastic systems. The 1-st Virtual Control Conference (VCC-2010, Aalborg University, Denmark), pages 1-5, http://www.vcc-10.org/index_files/papers/p107.pdf.
40. (with A. Malyarenko) On parameter estimation of partly observed bilinear discrete-time stochastic systems, Metrika, pages 1–19, 2010 (accepted), Online first 27 Oktober 2010: DOI: 10.1007/s00184-010-0333-5.
41. On adaptive control problems of discrete-time stochastic systems. Preprints of the 18th IFAC World Congress Milano (Italy) August 28 - September 2, 2011, pages 12439-12444.

42. (with D. N. Politis) Sequential kernel estimation of a multivariate regression function. Proceedings of the IX International Conference 'System Identification and Control Problems', SICPRO'12, Moscow, 30 January – 2 February, 2012, pages 1-14 (accepted).
43. (with D. N. Politis) Non-parametric sequential estimation of a regression function based on dependent observations. Sequential Analysis, pages 1-26, 2011 (submitted).
44. (with U. Küchler) On a certainty equivalence design of continuous-time stochastic systems. SIAM Journal of Control and Optimization, pages 1–31, 2011 (submitted).
45. (with A. Berg and D. N. Politis) Estimating smoothness and optimal bandwidth for probability density functions, pages 1-16 (in progress).
46. (with U. Küchler) On sequential parameter estimation of stochastic delay differential equations by noisy observations, pages 1-39 (in progress).
47. (with U. Küchler and A. Gushchin) On truncated sequential parameter estimation procedure of a stochastic time delayed process, pages 1-16 (in progress).
48. One investigation method of a ratios type estimators. 16th IFAC Symposium on System Identification, Brussels, Belgium, July 11-13, pages 1-6, 2012 (in progress).

BOOKS

1. (with A.V.Dobrovidov, G.M.Koshkin.) Nonparametric estimation of functionals of stationary sequences distributions. Moscow.: Nauka, 2004. - 508 p. (in Russian)
2. (with A.V.Dobrovidov, G.M.Koshkin.) Non-parametric models and statistical inference from dependent observations. USA.: Kendrick Press, 2011. - 518 p. (to be published)
(Russian original: V.A.Vasiliev, A.V.Dobrovidov, G.M.Koshkin. Non-parametric estimation of functionals of stationary sequences distributions. Moscow.: Nauka, 2004. - 508 p.)