Mamikon S. Ginovyan

Curriculum Vitae

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Contact Information

Boston University
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Academic Positions

- **2006 – present** Senior Lecturer, Department of Mathematics and Statistics, Boston University
- **2004 – 2006** Visiting Professor, Department of Mathematics and Statistics, Boston University
- **1993 – 2004** Research Deputy Director, Institute of Mathematics of Armenian Academy of Sciences
- **1986 – 1993** Senior Scientific Researcher, Institute of Mathematics of Armenian Academy of Sciences
- **1981 – 1986** Junior Scientific Researcher, Institute of Mathematics of Armenian Academy of Sciences

Education and Degrees

- **1999** Doctor of Mathematical Sciences (= European Habilitation degree), Yerevan State University
    - **Dissertation:** "Nonparametric Statistical Analysis for Stationary Gaussian Processes"
- **1981** **Ph.D.** (candidate of Phys.- Math. Sciences), St-Petersburg Branch of Steklov Mathematical Institute of Russian Academy of Sciences
    - **Dissertation:** "Some Statistical Problems for Stationary Gaussian Time Series".
    - **1980** **M.A.** St-Petersburg Branch of Steklov Mathematical Institute of Russian Academy of Sciences
- **1977** **B.S.** Yerevan State University, Department of Mathematics

Fields of Research Interests

- Probability and Statistics
- Statistics of Stochastic Processes
- Time Series Analysis
- Parametric and Nonparametric Estimation
- Prediction Theory
- Theory of Toeplitz Operators
- Fourier Analysis

Visits

12/29/2001 – 03/23/2002 Visiting Scholar, Northeastern University (Boston, USA)
09/12/2000 – 12/16/2000 Visiting Scholar, Northeastern University (Boston, USA)

01/15/1999 – 03/14/1999 Visiting Scholar, Central Economics and Mathematics Institute of Russian Academy of Sciences (Moscow, Russia)
09/01/1982 – 08/28/1983 Postdoc, St-Petersburg Branch of Steklov Mathematical Institute of Russian Academy of Sciences (St-Petersburg, Russia)

Research Grants

- **1991** Short Term Research Grant of International Science Foundation
- **2002** ANSEF Research Grant
- **2002 – 2003** NFSAT-CRDF Research Grant
- **2007 – 2011** National Science Foundation Research Grant
- **2013 – 2016** National Science Foundation Research Grant

A List of grants I have applied since appointed at Boston University

1. National Science Foundation (NSF), Statistics program, *Statistical Analysis of Time Series with Long Memory*, listed as CO-PI. Submitted on 11/06/2012, proposed duration: three years. Proposed amount: $576,219.00. DMS-1309009. *Outcome*: **Awarded**, from 09/01/2013 to 09/01/2016.

2. National Science Foundation (NSF), Statistics program, *Statistical estimation and prediction for stationary models with intermediate or long memory*, listed as CO-PI. Submitted on 11/03/2011, proposed duration: three years. Proposed amount: $467,731.00. DMS-1208531. *Outcome*: **declined**.

3. National Science Foundation (NSF), Statistics program, *Statistical Analysis of Stationary Models with Long- or Intermediate-range Dependence and Toeplitz Operators*, listed as PI. Submitted on 11/02/2010, proposed duration: three years. Proposed amount: $125,167.00. DMS-1105787. *Outcome*: **declined**.

4. National Science Foundation (NSF), Statistics program, *Long and Short Memory Stationary Processes: Prediction and Estimation*, listed as CO-PI. Submitted on 11/06/2006, proposed duration: three years. Proposed amount: $576,219.00. DMS - 0706786. *Outcome*: **Awarded**, from 07/10/2007 to 07/10/2010.

Memberships

American Mathematical Society (AMS)
Armenian Mathematical Association (Union)
Editorial Board of the *Journal of Contemporary Mathematical Analysis*
Scientific Board of *National Foundation of Science and Advanced Technologies* (NFSAT, Armenia)

Conference Organization

1. International Conference *Harmonic Analysis and Approximations, I*
   September 18-25, 1998, Nor Amberd, Armenia
2. 5th International Conference *Mathematical Problems of Statistical Physics*
   August 26-September 2, 2000, Nor Amberd, Armenia
3. International Conference *Harmonic Analysis and Approximations, II*
   September 11-18, 2001, Nor Amberd, Armenia
4. 6th International Conference *Mathematical Problems of Statistical Physics*
   August 24-31, 2002, Tsakhkadzor, Armenia
5. International Conference *Mathematics in Armenia: Advances and Perspectives*
   September 30 – October 7, 2003, Tsakhkadzor, Armenia
6. International Conference *Application of Multivariate Statistical Analysis in Economics and Estimation Theory*

May 23 - 30, 2004, Tsakhkadzor, Armenia

7. The 26th New England Statistics Symposium, Boston University, April 2012.

Participation in Conferences

1. Vilnius International Conferences on Probability and Statistics (1981)
2. International Conference on Limit Theorems In Probability and Statistics, Vesprem, Hungary (1982)
3. Vilnius International Conferences on Probability and Statistics (1985)
4. Vilnius International Conferences on Probability and Statistics (1989)
5. International Congress of Mathematicians, Zurich, Switzerland (1994)
6. 4th World Congress of the Bernoulli Society, Vienna, Austria (1996)
7. Vilnius International Conferences on Probability and Statistics (1998)
8. International Conference *Harmonic Analysis and Approximations, I* Nor Amberd, Armenia (1998)
9. 5th International Conference *Mathematical Problems of Statistical Physic*" Nor Amberd, Armenia (2000)
10. International Conference *Harmonic Analysis and Approximations, II* Nor Amberd, Armenia (2001)
11. 27th International Conference on Stochastic Processes and their Applications, Cambridge, UK (2001)
12. 6th International Conference *Mathematical Problems of Statistical Physics* Tsakhkadzor, Armenia (2002)
13. Vilnius International Conferences on Probability and Statistics (2002)
14. International Conference *Application of Multivariate Statistical Analysis in Economics and Estimation Theory* Tsakhkadzor, Armenia (2004)
15. Barcelona Conference on Asymptotic Statistics (BAS 2008)
16. *Statistique Asymptotique des Processus Stochastiques VII* LeMans, France (2009)
17. The 23th New England Statistics Symposium, University of Connecticut (2009)
18. The 24th New England Statistics Symposium, University of Connecticut (2011)
19. International Conference *Harmonic Analysis and Approximations, V* Tsaghkadzor, Armenia (2011)
20. The 26th New England Statistics Symposium, Boston University (2012)
21. Second International Conference Mathematics in Armenia: *Advances and Perspectives* Tsaghkadzor, Armenia (2013)

List of Publications

Books

1. Ginovyan, M. S. *"Mathematics in Armenia. An Overview,"* Armenian Academy of Science, Yerevan (2003).
2. Tovmasyan, N. E., Ginovyan, M. S. (editor), *"Non-Regular Differential Equations and Calculations of Electromagnetic Fields."* World Scientific Pub Co Inc (September 1998).

Papers

1. Ginovyan, M. S. "Asymptotic behavior of Toeplitz determinant." *Zapiski Nauchnykh Seminarov POMI*, vol. 97 pp. 22-31 (1980). **MR602358 (82g: 60054).** English translation in: *Journal of Soviet Mathematics* (1984) vol. 24, issue 5, pp. 494-500.
2. Ginovyan, M. S. "$\sqrt{n}$ - approximation of the likelihood function," *Zapiski Nauchnykh Seminarov POMI*, vol. 98, pp. 33-47 (1980). **MR591860 (82c: 62127).** English translation in: *Journal of Soviet Mathematics* (1983) vol. 21, issue 1, pp. 20-31.
3. Ginovyan, M. S. "Some Statistical Problems for Stationary Gaussian Time Series." Preprint, 11p. St-Petersburg (1981).
4. Ginovyan, M. S. "Asymptotic behavior of the logarithm of likelihood function involving polynomial zeros of spectral density." *Zapiski Nauchnykh Seminarov POMI*, vol. 108, pp. 5-21 (1981). **MR629397 (83e: 62117).** English translation in: *Journal of Soviet Mathematics* (1984) vol. 25, issue 3, pp. 1113-1125.

5. Ginovyan, M. S. “On the asymptotical estimation of the maximum likelihood of parameters of the spectrum of a stationary Gaussian time series.” *Limit Theorems in Probability and Statistics*, vol. 1 (P. Revesz, ed.) *Coll. Math. Soc. J. Bolyai*, 36, North-Holland, Amsterdam, pp. 457-497 (1984). **MR807570 (87c: 62166).**
6. Ginovyan, M. S. “Local asymptotic normality of a family of Gaussian distributions.” *Zapiski Nauchnykh Seminarov POMI*, vol. 136, pp. 13-27 (1984). **MR758473 (86c: 62017).** English translation in: *Journal of Soviet Mathematics* (1986) vol. 33, issue 1, pp. 706-715.
7. Ginovyan, M. S. “On goodness-of-fit test for testing of complex hypothesis on spectrum of stationary Gaussian sequence.” *Doklady Akademii Nauk Arm. SSR*, vol.80, N. 1, pp. 23-27 (1985). **MR797079 (87k: 62159).**
8. Ginovyan, M. S. “On the asymptotic estimator of the maximum likelihood of parameters of the spectral density having zeros.” *Acta Scien. Math*. Szeged, vol. 50, No. 1-2, pp. 169-182 (1986). **MR862191 (88b: 62184).**
9. Ginovyan, M. S. “On estimation of functionals of spectral density having zeros.” *Doklady Akademii Nauk Arm. SSR*, vol. 83, no. 4, pp. 171-174 (1986). **MR889725 (88d: 62158).**
10. Ginovyan, M. S. “Asymptotically efficient nonparametric estimation of functionals of a spectral density having zeros.” *Theory Probab. Appl.*, vol. 33, No. 2, pp. 315-322 (1988). English translation *Theory Probab Appl* 33(2): 296-303. **MR954578 (89j: 62053).**
11. Ginovyan, M. S. “On estimating the value of a linear functional of the spectral density of a Gaussian stationary process.” *Theory Probab. Appl.*, vol. 33, No. 4, pp. 777-781 (1988). English translation *Theory Probab Appl.* 33(4): 722-726. **MR979749 (90c: 62098).**
12. Ginovyan, M. S. “On distribution of quadratic functionals in Gaussian stationary process.” *Doklady Akademii Nauk Arm. SSR*, vol. 89, pp. 147-150 (1989). **MR1064580 (91j: 60069).**
13. Ginovyan, M. S. “A note on Central Limit theorem for Toeplitz type quadratic forms in stationary Gaussian variables.” *Journal of Contemporary Math. Anal.*, vol. 28, No. 2, pp. 78-81 (1993). **MR1359889.**
14. Ginovyan, M. S. “The asymptotic properties of spectrum estimate of homogeneous Gaussian field.” *Doklady Akademii Nauk Armenii*, vol. 94, No. 5, pp. 264-269 (1993). **MR1642463 (99i: 62230).**
15. Ginovyan, M. S. “On Toeplitz type quadratic functionals in Gaussian stationary process.” *Theory Probab. and Rel. Fields*, vol. 100, pp. 395-406 (1994). **MR1305588 (96f: 60032).**
16. Ginovyan, M. S. “Asymptotic properties of spectrum estimate of stationary Gaussian processes.” *Journal of Contemporary Math. Anal.*, vol. 30, No. 1, pp. 1-16 (1995). **MR1643528 (2000a: 62235).**
17. Ginovyan, M. S. “On asymptotic behavior of Toeplitz determinants.” in *Theory of Functions and Applications* (Collection of Works Dedicated to the memory of M. M. Djrbashian), pp. 57-60, Yerevan (1995).
18. Ginovyan, M. S. “Asymptotic upper bounds for the risk of estimators of linear functionals of a spectral density function.” *Journal of Contemporary Math. Anal*., vol. 31, No. 5, pp. 1-9 (1996). **MR1693840 (2000g: 62113).**
19. Ginovyan, M. S. “Nonparametric estimation of functionals of a spectral density function.” *Abstracts of Communications* “4th World Congress of the Bernoulli Society,” pp. 25-26, Vienna, Austria (1996).
20. Ginovyan, M. S. “On Kullback asymptotic information for stationary Gaussian measures.” *Computer Science and Information Technologies* pp. 236-238, Yerevan (1997).
21. Ginovyan, M. S. “Nonparametric Estimation of Linear Functionals of a Spectral Density Function.” *Abstracts of Communications* “7th Vilnius Conference on Probability Theory and Mathematical Statistics, 22nd European Meeting of Statisticians,” pp. 218-219, Vilnius (1998).
22. Ginovyan, M. S. “Nonparametric Statistical Analysis of stationary Gaussian processes.” Yerevan State University, Preprint, 30p., Yerevan (1999).
23. Ginovyan, M. S. “On large deviation principle for quadratic functionals of stationary Gaussian processes.” *Computer Science and Information Technologies* (CSIT'99) pp.135-137, Yerevan (1999).
24. Ginovyan, M. S. “Asymptotic behavior of the prediction error for stationary Random sequences.” *Journal of Contemporary Math. Anal*., vol. 34, No. 1, pp. 18-36 (1999). **MR1854056 (2002g: 60053).**
25. Ginovyan, M. S. “Nonparametric estimation of the spectrum of homogeneous Gaussian fields.” *Journal of Contemporary Math. Anal.*, vol. 34, No. 2, pp. 1-15 (1999). **MR1850715 (2002h: 62297).**

26. Ginovyan, M. S. “Locally asymptotically normal families of Gaussian distributions.” *Journal of Contemporary Math. Anal.*, vol. 34, No. 5, pp. 18-28 (1999). **MR1854064 (2002g: 62140).**
27. Ginovyan, M. S. “Asymptotically exact bounds for minimax risk of estimators of linear functionals.” *Journal of Contemporary Math. Anal.*, vol. 35, No. 3, pp. 10-20 (2000). **MR1855231 (2002h: 62296).**
28. Ginovyan, M. S. “Asymptotically efficient estimation of functionals of spectral density function.” *Journal of Contemporary Math. Anal.*, vol. 36, No. 2, pp. 1-14 (2001). **MR1899600 (2003c: 62085).**
29. Ginovyan, M. S. “Asymptotic Distribution of Toeplitz Type Quadratic Forms in Gaussian Stationary Processes.” *Harmonic Analysis and Approximations II*, pp. 25-27 (2001).
30. Ginovyan, M. S. “Asymptotically efficient nonparametric estimation of nonlinear spectral functionals.” *Acta Applicandae Mathematicae*, vol. 78, pp. 145-154 (2003). **MR2024019 (2004k: 60098).**
31. Ginovyan, M. S. “Chi-square type goodness-of-fit tests for stationary Gaussian process.” *Journal of Contemporary Math. Anal.*, vol. 38, no. 2, pp. 1-13 (2003). **MR2136319 (2006b: 62131).**
32. Ginovyan, M. S., Mikaelyan, L. V. “Inversion of Wiener-Hopf truncated operators and prediction error for continuous time ARMA processes.” *Journal of Contemporary Math. Anal.*, v. 38, no. 2, pp. 14-25 (2003). **MR2136320 (2005m: 62160).**
33. Ginovyan, M. S. “Goodness-off-fit Tests for Stationary Gaussian Processes.” *Application of Multivariate Statistical Analysis in Economics and Estimation Theory*, Moscow (2004) pp. 20-22.
34. Ginovyan, M. S., Aharonyan, N., Aramyan, R., Ohanyan, V., Sukiasyan, H. “Bivariate double sampling X-bar charts.” *Application of multivariate statistical analysis in economics and estimation theory*, Moscow (2004) pp. 23-25.
35. Ginovyan, M. S., Sahakyan, A. A. “On Central Limit Theorem for Toeplitz Type Quadratic Forms of Stationary Sequences.” *Institute of Mathematics*, Preprint No. 2004-01 (2004).
36. Ginovyan, M. S., Sahakyan, A. A. “Central Limit Theorem for Toeplitz Type Quadratic Functionals of Stationary Processes.” *Journal of Contemporary Mathematical Analysis* (2004) vol. 39, No. 1, pp. 60-82. **MR2168199 (2007a: 60017).**
37. Ginovyan, M. S., Sahakyan, A. A. “On Central Limit Theorem for Toeplitz Quadratic Forms of Stationary Sequences.” *Theory Probability and its Applications* (2004) vol. 49, No. 4, pp. 653-671. English translation *Theory Probab. Appl.* 49 (2005), no. 4, 612–628. **MR2142560 (2006a: 60038).**
38. Ginovyan, M. S. “Asymptotic Behavior of the Finite Predictor for Stationary Processes.” *Harmonic Analysis and Approximations III*, pp. 25-26, Yerevan, Armenia (2005).
39. Ginovyan, M. S., Sahakyan, A. A. “Limit Theorems for Toeplitz Quadratic Functionals of Continuous-time Stationary Processes.” *Probability Theory and Related Fields* (2007) vol. 138, pp. 551-579. **MR2299719 (2008g:60102)**
40. Ginovyan, M. S., Sahakyan, A. A. “Error Bounds for Approximations of Traces of Products of Truncated Toeplitz Operators.” *Journal of Contemporary Mathematical Analysis* (2008) vol. 43, No. 4, pp. 195- 05. **MR2526428.**
41. Ginovyan, M. S., Sahakyan, A. A. “A Note on Approximations of Traces of Products of Truncated Toeplitz Matrices.” *Journal of Contemporary Mathematical Analysis* (2009), vol. 44, No. 4, pp. 262-269.
42. Ginovyan, M. S., Mikaelyan, L. V. “Prediction Error for Continuous-time Stationary Processes with Singular Spectral Densities.” *Acta Applicandae Mathematicae* (2010) vol. 110, No. 1 pp. 327-351. Published online December 2008. DOI 10.1007/s10440-008-9414-0.
43. Ginovyan, M. S. “Efficient Estimation of Spectral Functionals for Gaussian Stationary Models.” *Communications on Stochastic Analysis* (2011) vol. 5, No. 1, pp. 211-232.
44. Ginovyan, M. S., Sahakyan, A. A. “Trace Approximations of Products of Truncated Toeplitz Operators.” *Probability Theory and Appl*. (2011) vol. 56, No. 1, pp. 123-139.
45. Ginovyan, M. S. “Efficient Estimation of Spectral Functionals for Continuous-time Stationary models.” *Acta Applicandae Mathematicae* (2011) vol. 115, No. 2, pp. 233-254. Published online: DOI 10.1007/s10440-011-9617-7, 2011.
46. Ginovyan, M. S., Sahakyan, A. A. “Trace Approximations of Products of Truncated Toeplitz Operators.” *Theory Probability Appl.* vol. 56, No. 1, pp. 57-71, 2012.
47. Ginovyan, M. S., Sahakyan, A. A. “On the trace approximations of products of Toeplitz matrices.” *Statistics and Probability Letters*, 83(3), 753-760 (2013), doi:10.1016/j.spl.2012.11.019

48. Ginovyan, M. S., Sahakyan, A. A. "On the Trace Approximation Problem for Truncated Toeplitz Operators and Matrices." *J. of Contemp. Math Analysis*. vol. 49, no. 1, pp. 1-17, 2014.
49. Ginovyan, M. S., Sahakyan, A. A. and Taqqu, M. S. "The Trace Problem for Toeplitz Matrices and Operators and its Impact in Probability." *Probability Surveys*. vol. 11, pp. 393–440, 2014. DOI: 10.1214/13-PS217 (http://arxiv.org/abs/1304.6703).
50. Bai, S., Ginovyan M.S. and Taqqu, M. S. " Functional llimit ttheorems for Toeplitz qquadratic ffunctionals of ccontinuous time Gaussian sstationary pprocesses." *Statistics and Probability Letters*, 104, 58-67 (2015).
51. Bai, S., Ginovyan M.S. and Taqqu, M. S. " Limit theorems for quadratic forms of Levy-driven continuous-time linear processes." *Stochastic Processes and Applications*. 126, 1036–1065 (2016).
52. Ginovyan, M. S., Sahakyan, A. A. "On the robustness to small trends of parameter estimation for continuous-time stationary models with memory." *J. of Contemp. Math Analysis*. 51 (5), 215-224 (2016. arXiv:1601.07141v1 [math.ST]
53. Ginovyan, M. S., Sahakyan, A. A. " Robust estimation for continuous-time linear models with memory." *Theory Probability and Mathematical Statistics*. Submitted.

Conference papers

1. Ginovyan, M. S. "Asymptotic differentiability of Gaussian distributions." *Abstracts of Communications* "3rd Vilnius Conference on Probability Theory and Mathematical Statistics," pp. 131-132, Vilnius (1981).
2. Ginovyan, M. S. "On the asymptotical estimation of the maximum likelihood." *Abstracts of Communications* "Limit Theorems in Probability and Statistics," p. 12, Vesprem, Hungary (1982).
3. Ginovyan, M. S. "Nonparametric estimation of linear functionals on spectral density function." *Abstracts of Communications* "4th Vilnius Conference on Probability Theory and Mathematical Statistics," pp. 167-168, Vilnius (1985).
4. Ginovyan, M. S. "Nonparametric estimation of functionals on spectral density function of Gaussian stationary process." *Abstracts of Communications* "5 th Vilnius Conference on Probability Theory and Mathematical Statistics," pp. 136-137, Vilnius (1989).
5. Ginovyan, M. S. "On estimation of the spectrum of a stationary Gaussian process." *Abstracts of Communications* "International Congress of Mathematicians," p. 148, Zurich, Switzerland (1994).
6. Ginovyan, M. S. "Asymptotic properties of spectrum estimates for stationary Gaussian processes," *Abstracts of Communications* "Multivariate statistical analysis and estimation theory," pp. 16-18, Tsakhkadzor (1996).
7. Ginovyan, M. S. "Statistical estimation of functionals of a spectral density function for stationary Gaussian processes." *Application of multivariate statistical analysis in economics and estimation theory* pp. 25-26, Moscow (1997).
8. Ginovyan, M. S. "Some Remarks on Asymptotic Behavior of Toeplitz Determinants." *Harmonic Analysis and Approximations*, pp. 20-21 (1998).
9. Ginovyan, M. S. "Efficient estimation of spectral density functionals." *Abstracts of Communications* "27th Conference on Stochastic Processes and their Applications" (Cambridge, UK), pp. 9-10 (2001).
10. Ginovyan, M. S. "Nonparametric estimation of spectral functionals." *8th Vilnius Conference on Probab. Theory and Math. Statistics*, pp. 103-104 (2002).
11. Ginovyan, M. S. "Limit Theorems for Toeplitz Type Quadratic Forms and Functionals in Stationary Processes." *Mathematics in Armenia: Advances and Perspectives*, pp. 43-44 (2003).
12. Ginovyan, M. S. "Approximations of Traces of Products of Wiener-Hopf Operators and Applications." *Abstracts of Communications* "Barcelona Conference on Asymptotic Statistics (BAS2008)" (2008).
13. Ginovyan, M. S., Mikaelyan, L. V. "Prediction Error for Continuous-time Stationary Processes with Singular Spectral Densities." *Abstracts of Communications* "Harmonic Analysis and Approximations, IV," (2008) pp. 92-94.
14. Ginovyan, M. S., Sahakyan, A. A. "Approximations of Traces of Products of Truncated Toeplitz Operators." *Abstracts of Communications* "Harmonic Analysis and Approximations, IV," (2008), pp. 108-111.

15. Ginovyan, M. S. “Statistical Estimation of Spectral Functionals for Continuous-time Stationary Models.” *Abstracts of Communications* “Statistique Asymptotique des Processus Stochastiques VII,” LeMans, France (March 2009).
16. Ginovyan, M. S. “Estimation of Spectral Parameters in Gaussian Stationary Models.” *Abstracts of Communications* “Harmonic Analysis and Approximations, V,” (2011) pp. 42-44.
17. Ginovyan, M. S., Sahakyan, A. A. “The Trace Approximation Problem for Toeplitz Operators and Applications.” *Abstracts of Communications* “Second International Conference Mathematics in Armenia: Advances and Perspectives,” pp. 92-94 (2013).
18. Ginovyan, M. S. “Parameter estimation for continuous-time stationary models with memory”. *Abstracts of Communications* 29th New England Statistics Symposium, University of Connecticut, April 2015, p. *28-29.*

Theses

1. Ginovyan, M. S. “Some Statistical Problems for Stationary Gaussian Time Series.” 122 pages, For Candidate of Phys.- Math. Sciences (= PhD), St-Petersburg Branch of Steklov Mathematical Institute of Russian Academy of Sciences, May 1981.
2. Ginovyan, M. S. “Nonparametric Statistical Analysis for Stationary Gaussian processes.” 187 pages, For Doctor of Phys.- Math. Sciences (= European Habilitation degree), Yerevan State University, May 1999.

Works in progress

1. Ginovyan, M. S. “Statistics of Stationary Gaussian processes.”
2. Ginovyan, M. S. “Asymptotic Efficiency of the Sample Covariances of Gaussian Stationary Processes.”
3. Ginovyan, M. S. “Asymptotic Behavior of the Finite Predictor for Continuous-time Stationary Processes.”
4. Ginovyan, M. S. (with Sahakyan, A. A.) “Trace Classes of Toeplitz Operators and Matrices.”
5. Ginovyan, M. S. (with Sahakyan, A. A.) “A Continual Analog of Avram-Parter Theorem.”
6. Ginovyan, M. S. (with Taqqu, M. S.) “The prediction problem for discrete-time stationary Gaussian processes.”

Recent talks

1. Boston University Statistics Seminar, October 2005, *Chi-square Type Goodness-of-fit Tests for Stationary Gaussian Processes*
2. Brown University Analysis Seminar, November 2005, *Best Linear Prediction Problem for Stationary Processes*
3. Boston University Probability and Statistics Seminar, 2005-2006, a series of talks on *Spectral Theory of Stationary Processes*
4. Boston University Probability and Statistics Seminar, April 2008, *Szego Theorem and Prediction Problem for Discrete-time Stationary Processes*
5. Boston University Probability and Statistics Seminar, December 2008, *Approximations of Traces of Products of Truncated Toeplitz Operators and Applications*
6. International Conference Statistique Asymptotique des Processus Stochastiques VII, LeMans, France, March 16-19, 2009, *Statistical Estimation of Spectral Functionals for Continuous-time Stationary Models*
7. The 23rd New England Statistics Symposium, University of Connecticut, April 2009, *Estimation of Spectral Functionals*
8. Yale University Statistics Seminar, November 2009, *Efficient Estimation of Spectral Functionals for Stationary Models*
9. The 24th New England Statistics Symposium, University of Connecticut, April 2011, *The Trace Problem for Truncated Toeplitz Operators and Applications to Stationary Models*
10. International Conference Harmonic Analysis and Approximations, V, September 10-17, Tsaghkadzor,

2011, *Estimation of Spectral Parameters in Gaussian Stationary Models*

11. The 26th New England Statistics Symposium, Boston University, April 2012, A*symptotic Behavior of the Prediction Error for Stationary Models with Memory*
12. The 27th New England Statistics Symposium, University of Connecticut, April 2013, *On Estimation and Prediction Problems for Stationary Time Series Models with Memory*
13. Second International Conference Mathematics in Armenia: Advances and Perspectives, Tsaghkadzor, Armenia, August 24 - 31, 2013, *The Trace Approximation Problem for Toeplitz Operators and Applications*
14. The 28th New England Statistics Symposium, Harvard University, April 2014, *On Asymptotic Behavior of the Prediction Error Variance for Stationary Models.*
15. University of California San Diego (UCSD) Probability and Statistics Seminar, January 2015, *Efficient Nonparametric Estimation of Spectral Functionals for Continuous-time Gaussian Stationary Models.*
16. The 29th New England Statistics Symposium, University of Connecticut, April 2015, *Parameter estimation for continuous-time stationary models with memory.*
17. The 30th New England Statistics Symposium, Yale University, April 2016, *Robustness to small trends of estimation for continuous-time time series models with memory.*
18. Random processes and time series: Theory and applications. A conference in honor of Murray Rosenblatt, UC San Diego, October 21-23, 2016, *Robust estimation for continuous-time linear models with memory.*

Teaching

1. Boston University (Fall 2004 – present)

1. GRS MA882 Stat Seminar 2
2. GRS MA781 Estimation Theory
3. MET AT743 Regression and Time Series.
4. CAS MA588 Nonparametric Statistics.
5. CAS MA587 Sampling Design: Theory & Methods.
6. CAS MA586 Design of Experiments.
7. CAS MA582 Mathematical Statistics
8. CAS MA570 Stochastic Methods of Operations Research.
9. CAS MA214 Applied Statistics.
10. CAS MA213 Basic Statistics & Probability
11. CAS MA124 Calculus II
12. MET MA123 Calculus I
13. CAS MA120 Applied Mathematics
14. CAS MA116 Statistics II
15. CAS MA115 Statistics I
16. CAS MA113 Elementary Statistics

2. State Engineering University of Armenia (2002 – 2004)

1. Probability and Stochastic Processes for Engineers
2. Prediction of Stationary Stochastic Processes

3. Northeastern University (Boston, MA, Fall 2000 and Winter 2002)

1. Differential Calculus (Calculus I)
2. Integral Calculus (Calculus II)

4. Yerevan State University (1982 – 1999)

1. Probability Theory and Mathematical Statistics
2. Theory of characteristic functions

3. Limit theorems for weakly dependent random variables
4. Statistics of Stationary Processes
5. Geometry of Gaussian Stochastic Processes.