

CURRICULUM VITAE

SHARYN SERGII

PERSONAL INFORMATION

Date of birth: May 3, 1972
Address: Department of Mathematics and Computer Sciences,
Precarpathian National University,
57 Shevchenka str., Ivano-Frankivsk, Ukraine, 76018
Phone (office): +38-0342-59-60-17
Phone (cell): +38-095-700-52-88
e-mail: sharyn.sergii@gmail.com
Web page: www.sharyn.pu.if.ua

EDUCATION

1989 - 1994 Ivan Franko Lviv State University,
Department of Mechanics and Mathematics,
student

1994 - 1996 Pidstryhach Institute for Applied Problems of Mechanics and Mathematics
of National Academy of Sciences of Ukraine,
Department of Functional Analysis,
post-graduate student

1997 Ivan Franko Lviv State University,
PhD degree

2010 - 2013 Vasyl Stefanyk Precarpathian National University,
Department of Mathematics and Computer Sciences,
DrSci student

2017 Institute of Mathematics of National Academy of Sciences of Ukraine,
DrSci degree

Title of PhD thesis: Functional calculus for generators of (C_0) -semigroups over Banach spaces in convolution algebras of Schwartz distributions.

Thesis Advisor: Prof. Dr hab. Oleh Lopushansky

Title of DrSci thesis: Algebras of polynomial distributions on infinite dimensional spaces and their application to operator calculus.

RESEARCH INTERESTS

Primary research interests: functional analysis; theory of distributions; theory of semigroups of operators; theory of hyperfunctions.

Specific research interests: polynomial (ultra)distributions in infinite dimensional analysis; extension of integral transformations onto algebras of polynomial (ultra)distributions; functional calculus for generators of (semi)groups, (ultra)distribution and hyperfunction semigroups.

PROFESSIONAL EXPERIENCE

Academic Positions:

- 1997 - 1998 Pidstryhach Institute for Applied Problems of Mechanics and Mathematics of National Academy of Sciences of Ukraine, Lviv, Department of Functional Analysis, junior scientific researcher
- 1998 - 1999 Pidstryhach Institute for Applied Problems of Mechanics and Mathematics of National Academy of Sciences of Ukraine, Lviv, Department of Functional Analysis, scientific researcher
- 1999 - 2002 Precarpathian National University, Ivano-Frankivsk, Department of Mathematics and Computer Sciences, assistant
- 2002 - 2014 Precarpathian National University, Ivano-Frankivsk, Department of Mathematics and Computer Sciences, associate professor
- 2014 - till now Precarpathian National University, Ivano-Frankivsk, Vice-Rector on scientific and pedagogical work

International Experience:

- September 21-24, 2006 5-th International Conference on Applied Mathematics, Baia Mare, Romania
- May 4-16, 2009 Internship in Rzeszów University, Faculty of Mathematics and Natural Sciences, Institute of Mathematics, Rzeszów, Poland
- September 13-19, 2009 International Conference “*Spaces of Analytic and Smooth Functions III*” Będlewo near Poznań, Poland
- October 25 - November 5, 2010 Internship in Rzeszów University, Faculty of Mathematics and Natural Sciences, Institute of Mathematics, Rzeszów, Poland
- October 25 - November 8, 2011 Internship in Université Lille-1, laboratoire Paul Painlevé, Lille, France
- May 6-12, 2012 International Conference “*Functional Analysis: Applications to Complex Analysis and Partial Differential Equations*” Będlewo near Poznań, Poland
- June 29 - July 2, 2014 XVIIth Conference on Analytic Functions and Related Topics Chełm, Poland
- I semester of 2016-2017 acad. year Visiting Professor, Institute of Mathematics, The State School of Higher Education, Chełm, Poland
- II semester of 2016-2017 acad. year Visiting Professor, Department of Physics and Applied Informatics, University of Lodz, Lodz, Poland
- II semester of 2017-2018 acad. year Visiting Professor, Department of Physics and Applied Informatics, University of Lodz, Lodz, Poland

MEMBERSHIP

- Executive Secretary of the Scientific Journal “Carpathian Mathematical Publications”
- Member of Editorial Board of the Scientific Journal “Creative Mathematics and Informatics”
- Member of Editorial Board of the Scientific Journal “Journal of Vasyl Stefanyk Precarpathian National University”
- Reviewer of Zentralblatt MATH and Mathematical Reviews
- Member of Ukrainian Mathematical Society, Ivano-Frankivsk branch
- Member of Scientific Society named after T. Shevchenko in Lviv, Ivano-Frankivsk branch

COMMUNICATION SKILLS

Languages:

- English: Good written and oral skills
(Certificate AM 4545 of Ukrainian-Canadian Business Center SBEDIF)
- Polish: Good written and oral skills
- Russian: Excellent written and oral skills
- Ukrainian: Excellent written and oral skills
(native language)

Software:

- Mathematical software: Mathematica, Maple
- Publishing software: \LaTeX
- Office software: Libre Office, MS Office
- Programming language: Object Pascal & Delphi

LIST OF SELECTED PUBLICATIONS

1. Sharin S.V., *The Paley-Wiener theorem for Schwartz distributions with support on a half-line*, J. Math. Sci., (1999), **96**, no. 2, 2985–2987. doi: 10.1007/BF02169692
2. Sharyn S.V., *Some generalized functions of a generator of fractional integration semigroup*, Math. Methods Phys. Mech. Fields, (1999), **42**, no. 3, 28–30. (in Ukrainian)
3. Sharin S.V., *The Cross-Correlation Operation of Schwartz Distributions*, J. Math. Sci., (2001), **107**, no. 1, 3604–3609. doi: 10.1023/A:1011950408930
4. Sharyn S.V., Zagorodnyuk A.V., *Functional calculus and homomorphisms in the algebra of analytic functions of bounded type on a Banach space*, Appl. Probl. Mech. Math., (2007), **5**, 22–27. (in Ukrainian)
5. Sharyn S.V., Zagorodnyuk A.V., *Note on the weak polynomial topology*, Math. Stud., (2008), **30**, no. 1, 98–100.
6. Lopushansky O.V., Sharyn S.V., *Polynomial ultradistributions on cone \mathbb{R}_+^d* , Topology, (2009), **48**, no. 2–4, 80–90. doi:10.1016/j.top.2009.11.005
7. Patra M.I., Sharyn S.V. *Operator calculus on the class of Sato’s hyperfunctions*, Carpathian Math. Publ., (2013), **5**, no. 1, 114–120. doi: 10.15330/cmp.5.1.114-120

8. Lopushansky O.V., Sharyn S.V., *Generalized Hille-Phillips type functional calculus for multi-parameter semigroups*, Siberian Math. J. (2014), **55**, no. 1, 105–117. doi: 10.1134/S0037446614010133
9. Lopushansky O., Sharyn S., *Operators commuting with multi-parameter shift semigroups*, Carpathian J. Math. (2014), **30**, no. 2, 217–224.
10. Patra M., Sharyn S. *On cross-correlation of a hyperfunction and a real analytic function*, Internat. J. Math. Anal. (2015), **9**, no. 2, 95–100. doi: 10.12988/ijma.2015.411351
11. Sharyn S.V. *Paley–Wiener-type theorem for polynomial ultradifferentiable functions*, Carpathian Math. Publ., (2015), **7**, no. 2, 271–279. doi: 10.15330/cmp.7.2.271-279
12. Lopushansky O.V., Sharyn S.V., *Application of the Laplace Transform of Tempered Distributions to the Construction of Functional Calculus*, Ukrainian Math. J., (2016), **67**, no. 11, 1687–1703. doi: 10.1007/s11253-016-1183-8
13. Sharyn S. *Joint functional calculus in algebra of polynomial tempered distributions*, Meth. Funct. Anal. Top., (2016) **22**, no. 1, 62–73.
14. Sharyn S.V. *Gâteaux differentiability of polynomial test and generalized functions*, J. Math. Sci., (2017), **220**, no. 1, 15–26. doi: 10.1007/s10958-016-3164-8
15. Sharyn S. *Operator Calculus for Noncommuting Operators over Symmetric Fock Space*, Internat. J. Math. Anal. (2017), **11**, no. 1, 29–38. doi: 10.12988/ijma.2017.611124

Sharyn Sergii