Curriculum Vitae
May 3, 2022

DMYTRO SAVCHUK

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RESEARCH INTERESTS

Geometric and combinatorial group theory. Groups acting on rooted trees: self-similar, generated by automata, iterated monodromy groups, contracting and branch groups. Algorithmic aspects of self-similar groups. Automatic structures. Formal languages. p-adic dynamics. Thompson's groups. Developing software for computations in group theory. Geometry of $Out(F_n)$. Free and relatively free groups.

EDUCATION

06/2003 – 08/2009	*Ph.D. in Mathematics* Texas A&M University, College Station, TX Advisors: Dr. R. Grigorchuk and Dr. V. Nekrashevych Title: Asymptotic, algorithmic and geometric aspects of groups generated by automata
09/2001 – 07/2002	*M.S. in Mathematics*, Summa Cum Laude Kyiv Taras Shevchenko University, Kyiv, Ukraine
09/1997 – 07/2001	*B.S. in Mathematics*, Summa Cum Laude Kyiv Taras Shevchenko University, Kyiv, Ukraine

WORK EXPERIENCE

01/2020 – present	*Associate Professor and Associate Chair for Graduate Affairs* University of South Florida, Tampa, FL
08/2016 – present	*Associate Professor* University of South Florida, Tampa, FL
09/2012 – 08/2016	*Assistant Professor* University of South Florida, Tampa, FL
09/2009 – 09/2012	*Riley Assistant Professor* Binghamton University, Binghamton, NY
09/2003 – 08/2009	*Teaching Assistant and Instructor* Texas A&M University, College Station, TX
01/2002 – 05/2002	*Teaching Assistant* Kyiv Taras Shevchenko University, Kyiv, Ukraine

PUBLICATIONS

Preprints and in Preparation

1. *Embedding of HNN extensions of self-similar groups into the group of homotheties of the field of p-adic rationals* (with R. Grigorchuk), preprint available per request

2. *On duality of the affine actions on trees* (with I. Bondarenko), preprint available per request

3. *Explicit generating sets of the stabilizers of rational numbers in Thompson's group F* (with K. Baker), preprint available per request

4. *Submanifold Projection* (with L. Sabalka), preprint, 2012, 30 pages,
   http://arxiv.org/abs/1211.3111

Edited Volumes

5. *Special Issue: Developments in Language Theory 2020* (with N. Jonoska, editors), International Journal of Foundations of Computer Science, V. 32 (2021), no. 6.
   https://www.worldscientific.com/toc/ijfcs/32/06

6. *Developments in Language Theory. 24th International Conference, DLT 2020, Tampa, FL, USA, May 11–15, 2020, Proceedings* (with N. Jonoska, editors), Lecture Notes in Computer Science book series (LNCS), volume 12086, 2020
   https://link.springer.com/book/10.1007/978-3-030-48516-0

Published or Accepted

7. *Solenoidal Maps, Automatic Sequences, Van Der Put Series, and Mealy Automata* (with R. Grigorchuk), Journal of Australian Mathematical Society, 2022, 35 pages, to appear
   https://arxiv.org/abs/2006.02316

8. *Endomorphisms of regular rooted trees induced by the action of polynomials on the ring $\mathbb{Z}_d$ of d-adic integers* (with E. Ahmed), Journal of Algebra and its Applications, Vol. 19, No. 08, 2050154 (2020), http://arxiv.org/abs/1711.06735

9. *The lamplighter group of rank two generated by a bireversible automaton* (with E. Ahmed), Communications in Algebra, 2019, 3340–3354
   https://arxiv.org/abs/1802.03695

10. *A connected 3-state reversible Mealy automaton cannot generate an infinite Burnside group (extended version)* (with I. Klimann and M. Picantin), International Journal of Foundations of Computer Science, 29 (2018), no. 2, 297–314

11. *Affine Automorphisms of Rooted Trees* (with S. Sidki), Geom. Dedicata, 183 (2016), 195–213
    http://arxiv.org/abs/1510.08434

12. *Orbit automata as a new tool to attack the order problem in automaton groups* (with I. Klimann and M. Picantin), Journal of Algebra, 445 (2016), 433–457,
    http://arxiv.org/abs/1411.0158

13. *Ergodic decomposition of group actions on rooted trees* (with R. Grigorchuk), Proceedings of the Steklov Institute of Mathematics, V.292 (2016), Issue 1, 94–111
http://arxiv.org/abs/1412.8020

14. *A connected 3-state reversible Mealy automaton cannot generate an infinite Burnside group* (with Ines Klimann and Matthieu Picantin), Lecture Notes in Computer Science, V. 9168, 313–325, The 19th International Conference on Developments in Language Theory (DLT 2015), 2015, 12 pp., http://arxiv.org/abs/1409.6142

15. *An Example of an Automatic Graph of Intermediate Growth* (with A. Miasnikov), Annals of Pure and Applied Logic, 166 (2015), no. 10, 1037–1048, http://arxiv.org/abs/1312.3710

16. *Schreier graphs of actions of Thompson's group F on the unit interval and on the Cantor set*, Geometriae Dedicata, V.175 (2015), 355–372, http://arxiv.org/abs/1105.4017

17. *On the geometry of the edge splitting complex* (with L. Sabalka), Groups, Geometry and Dynamics, 8 (2014), no. 2, 565–598, http://arxiv.org/abs/1007.1998

18. *Self-similar groups acting essentially freely on the boundary of the binary rooted tree* (with R. Grigorchuk), Contemporary Mathematics, V.611, 9–48, 2014
http://arxiv.org/abs/1212.0605

19. *Essentially Free Actions of Self-similar Groups* (with R. Grigorchuk), Bulletin of Chernivtsi National University, Mathematics, V.2 (2012), no.2-3, 53–58.

20. *On restricting subsets of bases in relatively free groups* (with L. Sabalka), IJAC, V.22 (2012), no.4, http://arxiv.org/abs/1103.2992

21. *Automata generating free products of groups of order 2*, (with Y. Vorobets), Journal of Algebra, V.336 (2011), Issue 1, 53–66, 2011, available at http://arxiv.org/abs/0806.4801

22. *Some graphs related to the Thompson's group F*, in *Combinatorial and geometric group theory*, Trends in Mathematics (Birkhäuser), edited by O.Bogopolski, I.Bumagin, O.Kharlampovich and E.Ventura, 2010, 279–296, http://arxiv.org/abs/0803.0043

23. *Groups generated by 3-state automata over a 2-letter alphabet, II* (with I. Bondarenko, R. Grigorchuk, R. Kravchenko, Y. Muntyan , V. Nekrashevych and Z. Sunic), Journal of Math. Science (New York), V. 156 (2009), no.1, 187–208, http://www.arxiv.org/abs/0704.3876

24. *Classification of groups generated by 3-state automata over a 2-letter alphabet* (with I. Bondarenko, R. Grigorchuk, R. Kravchenko, Y. Muntyan, V. Nekrashevych and Z. Sunic), Algebra and Discrete Mathematics (2008), no.1, 1–163, http://arxiv.org/abs/0803.3555

25. *The spectral problem, substitutions and iterated monodromy* (with R. Grigorchuk and Z. Sunik), CRM Proceedings and Lecture Notes 42 (2007), 225–248,
http://arxiv.org/abs/math.GR/0703443

26. *Groups generated by 3-state automata over a 2-letter alphabet, I*, (with I. Bondarenko, R. Grigorchuk, R. Kravchenko, Y. Muntyan, V. Nekrashevych and Z. Sunic), São Paulo Journal of Math. Sciences, 1 (2007), no.1, 1–40, http://arxiv.org/abs/math.GR/0612178

27. *On Sushchansky p-groups* (with I. Bondarenko), Algebra Discrete Math., 2007, no.2, 22–42, http://arxiv.org/abs/math.GR/0612200

28. *On word problem in contracting automorphism groups of rooted trees*, Bulletin of the University of Kiev, Series: Physics & Mathematics, 2003, no.1, 51–56

Reports

29. *About classification of groups generated by automata with three states over an alphabet with two letters, and about some questions concerning these groups* (with I. Bondarenko, R. Grigorchuk, R. Kravchenko, Y. Muntyan, V. Nekrashevych and Z. Sunic), Bulletin of Chernivtsi National University, Mathematics, Issue 336–337 (2007), 29–39.

Undergraduate Exposition

30. (with N. Rudomino-Dusyatska) *Is gambling worth it?* (Ukrainian), In the world of Mathematics, V.5 (1999), no.3, 77–82

31. (with N. Rudomino-Dusyatska) *About D. Grave and some of his works on probability theory*, Abstracts of the Third Ukrainian-Scandinavian Conference in Probability Theory and Mathematical Statistics. June 8-12, 1999, Kyiv, Ukraine

32. *Projecting points on the exponent* (Ukrainian), In the world of Mathematics, V.4 (1998), no.4, 26–32

33. *Nobel Prize and Mathematicians* (Ukrainian), In the world of Mathematics, V.3 (1997), no.4, 62–64

SOFTWARE

- Package `AutomGrp` V.1.3.2 (last release on 30/09/2019) for `GAP` system for computations in groups and semigroups generated by automata (joint with Y. Muntyan), accepted `GAP` package http://www.gap-system.org/Packages/automgrp.html

- Frontend for the database of (3,2)-automata (developed jointly with Junyi Tu), http://savchuk.myweb.usf.edu/autom32new.html

AWARDS AND GRANTS

- (PI) Conference Support Grant "International Conference: Developments in Language Theory 2022", NSA ($15,400)   2021

- Conference Support Grant, ResearchOne, USF   2020

- (Co-PI) Conference Support Grant "International Conference: Developments in Language Theory 2020", NSF ($10,000) – Extended to DLT-2022 due to COVID pandemic   2019

- (Co-PI) Conference Support Grant "International Conference: Developments in Language Theory 2020", NSA ($15,400) – Cancelled due to COVID pandemic   2019

- Conference Support Grant, ResearchOne, USF   2018

- Conference Support Grant, USF Internal Award   2017

- AIM SQuaREs program (2017-2022)

- Grant from Helmsley foundation to enhance Calculus Curriculum at USF   2016

- Collaboration Grant for Mathematicians, Simons Foundation   2014-2021

- Proposal Enhancement Grant, USF Internal Award   2014

- New Researcher Grant, USF Internal Award   2013

- Ostrogradsky Prize for Researchers among Ukrainian University Students
  at the Institute of Mathematics of NAS in Ukraine, Kyiv, Ukraine   2001

- Soros Fellowship for Undergraduate Students, Kyiv, Ukraine   1998

SELECTED TALKS

Conference Talks

February 2022	(invited) Ivan Fedorovych Grygorchuk's 95-th Anniversary (online)
July 2021	(invited) 13th International Algebraic Conference in Ukraine (online)
	video of the talk
	Kyiv, Ukraine
July 2020	(invited) International conference: Kyiv Algebra 2020 (online)
	video of the talk
	Kyiv, Ukraine
October 2019	(invited) *AMS Fall Eastern Sectional Meeting #1151*,
	Binghamton University, NY
July 2019	(plenary) *12th International Algebraic Conference in Ukraine*,
	Vinnytsia, Ukraine
June 2019	(invited) *Zassenhaus Group Theory Conference*,
	Binghamton, NY
July 2018	*Geometric and Asymptotic Group Theory with Applications*,
	Korea Institute for Advanced Study, Seoul, Korea
April 2018	(invited) *AMS Spring Eastern Sectional Meeting #1139*,
	Northeastern University, Boston, MA
July 2017	(invited) *MealyM Final Event*, Paris, France
July 2017	*11th International Algebraic Conference in Ukraine*, Kyiv, Ukraine
May 2017	(invited, 1st talk) *AMS Sectional Meeting #1129*,
	Hunter College, CUNY, New York
May 2017	(invited, 2nd talk) *AMS Sectional Meeting #1129*,
	Hunter College, CUNY, New York
December 2016	(invited) *Groups and Actions: Geometry and Dynamics*, Kyiv, Ukraine
August 2016	(invited) *Workshop: Connections Between Complex Dynamics, Statistical Physics, and Limiting Spectra of Self-similar Group Actions*, IUPUI, Indianapolis, IN
August 2016	(invited) *Computational Group Theory Oberwolfach Workshop*,
	Oberwolfach, Germany
June 2016	(invited) *GAGTA-10*, Stevens Institute of Technology, Hoboken, NJ

Jan 2016	(invited) *AMS Joint Meeting*, Seattle, WA
Jun 2015	*AMS-EMS-PMS international meeting*, Porto, Portugal
May 2015	(invited) *Zassenhaus Group Theory Conference*, Binghamton, NY
Jan 2015	(invited) *AMS Joint Meeting*, San Antonio, TX
June 2014	(invited) *Topological Methods in Group Theory*, Ohio State University, Columbus, OH
May 2014	(invited) *Groups and Dynamics Workshop*, Texas A&M University, College Station, TX
Dec 2013	(invited) *Winter Meeting of Canadian Mathematical Society*, Ottawa, QC, Canada
August 2013	*Groups St Andrews 2013*, St Andrews, Scotland, UK
July 2013	(invited) *The 9-th International algebraic conference in Ukraine*, Lviv, Ukraine
May 2013	(invited) *GAGTA-7*, CUNY, New York, NY
April 2013	(invited) *AMS Sectional Meeting #1088*, Boston College, Chestnut Hill, MA
Dec 2012	(invited) *Winter Meeting of Canadian Mathematical Society*, Montreal, QC, Canada
Oct 2012	*Group Theory, Combinatorics, and Computing*, Boca Raton, FL
Jan 2012	(invited, 2 talks) *AMS Joint Meeting*, Boston, MA
Oct 2011	(invited) *AMS Sectional Meeting #1075*, Salt Lake City, UT
Oct 2011	(invited) *AMS Sectional Meeting #1074*, Lincoln, NE
Mar 2011	(invited) *Spring Topology and Dynamics Conference*, University of Texas at Tyler, Tyler, TX
Dec 2010	(invited) *Second Manhattan Group Theory Day*, Graduate Center, CUNY
May 2010	(invited) *AMS Sectional Meeting #1060*, Newark, NJ
Oct 2008	(invited) *AMS Fall Central Sectional Meeting #1043* Kalamazoo, MI
Oct 2008	(invited) *Self-similarity and Branching in Group Theory Workshop*, Banff International Research Station, Banff, Alberta, Canada
Aug 2008	*Computational Group Theory and Cohomology*, Grantham, United Kingdom
Jul 2008	(invited) *Group theory and complexity*, Steklov Mathematical Institute, Moscow, Russia
Jul 2008	(invited) *Groups generated by automata and related questions*, Kyiv National Taras Shevchenko University, Ukraine
Dec 2007	(invited) *Fields Workshop in Asymptotic Group Theory and Cryptography*, Carleton University, Canada
Jul 2007	*Groups and their actions*, Bedlewo, Poland
Jan 2007	*Geometric Groups on the Gulf Coast*, New Orleans, LA
Jul 2006	(invited) *Algebra, Topology, Functional and Stochastic Analysis*, Koziova, Ukraine

May 2006	*The 10-th Midrasha Mathematicae in: "Asymptotic Group Theory",* The Hebrew University of Jerusalem, The Institute for Advanced Studies
Jul 2005	(invited) *5-th International Algebraic Conference in Ukraine,* Odessa I.I. Mechnikov National University, Odessa, Ukraine
Jun 2005	(invited) *Geometric and Asymptotic Methods in Group Theory Workshop,* Banff International Research Station, Banff, Alberta, Canada
Nov 2004	*Asymptotic Group Invariants and their Applications Workshop,* Texas A&M University, College Station, TX
Jul 2004	*Advanced Course on Automata Groups,* Centre de Recerca Matemàtica, Barcelona, Spain

Seminar Talks

Feb 2022	*Topology and Dynamics Seminar*, University of Florida
Sep 2019	*Discrete Mathematics Seminar*, University of South Florida
Mar 2019	*Groups and Dynamics Seminar*, Texas A&M University
May 2018	*Groups and Dynamics Seminar*, Texas A&M University
Jan 2017	*Colloquium*, Indiana University Purdue University Indiana
Nov 2016	*Discrete Mathematics Seminar*, University of South Florida
Oct 2016	*New York Group Theory Seminar*, CUNY Graduate Center, NY
Jan 2016	*Colloquium*, Oregon State University, Corvallis, OR
Oct 2015	*Discrete Mathematics Seminar*, University of South Florida
Oct 2015	*Analysis Seminar (2 talks)*, University of South Florida
Mar 2015	*Discrete Mathematics Seminar*, University of South Florida
Oct 2014	*Discrete Mathematics Seminar*, University of South Florida
Aug 2014	*Groups and Dynamics Seminar*, Texas A&M University
May 2014	*CS Seminar of Laboratoire d'Informatique Algorithmique: Fondements et Applications*, Université Paris Diderot – Paris 7
Oct 2013	*Group Theory International Webinar*, hosted by Stevens institute of technology
Sep 2013	*Discrete Mathematics Seminar*, University of South Florida
Aug 2013	*Algebra seminar*, Universidade de Brasília, Brasília, Brazil
Apr 2013	*Discrete Mathematics Seminar*, University of South Florida
Mar 2013	*Topology seminar*, Saint Louis University, Saint Louis, MO
Nov 2012	*Discrete Mathematics Seminar*, University of South Florida
Oct 2012	*Discrete Mathematics Seminar*, University of South Florida (2 talks)
May 2012	*New York Group Theory Seminar*, CUNY Graduate Center, NY
Mar 2012	*Groups and Dynamics Seminar*, Texas A&M University
Feb 2012	*Colloquium*, University of South Florida, FL
Feb 2012	*Colloquium*, Western Carolina University, Cullowhee, NC
Jan 2012	*Algebra Colloquium*, Graduate Center, City University of New York
Jan 2012	*Colloquium*, Bowling Green State University, Ohio
Nov 2011	*Geometry & Topology seminar*, Graduate Center, City University of New York
Mar 2011	*Topology/Geometry seminar*, Yale University
Mar 2011	*Algebra Seminar*, Carleton University, Canada
Nov 2010	*Groups and Dynamics Seminar*, Texas A&M University
Nov 2010	*Geometry & Topology seminar*, Binghamton University
May 2010	*Group Theory International Webinar*, hosted by Stevens institute of technology
Mar 2010	*Geometry & Topology seminar*, Binghamton University

Mar 2010	*Algebra seminar*, Binghamton University
Nov 2009	*Topology & Geometric Group Theory Seminar*, Cornell University
Oct 2009	*New York Group Theory Seminar*, Graduate Center, City University of New York
Sep 2009	*Geometry & Topology seminar*, Binghamton University (2 talks)
Feb 2009	*Colloquium*, Binghamton University
Jan 2009	*Groups and Dynamics Seminar*, Texas A&M University
Dec 2008	*Groups and Dynamics Seminar*, Texas A&M University

Talks for Students and K-12

Apr 2015	*"Algebra around us"*,
	Pi Mu Epsilon (Florida Epsilon chapter) Induction Banquet Keynote speaker
May 2014	*"What do mathematicians do?"*,
	Interactive presentation for 3-rd graders at Chiles Elementary School, Tampa, FL
Oct 2013	*"Elliptic curves and their use in cryptography"*,
	Math Club, University of South Florida
Oct 2012	*"Fractals and where do we see them"*, Math Club, University of South Florida
Apr 2012	*"On the notions of dimension"*,
	Undergraduate Math Club, Binghamton University
Feb 2012	*"DNA computations and Graph theory"*,
	Undergraduate Math Club, Binghamton University
Oct 2011	*"Open Key Cryptography and how RSA works"*,
	Undergraduate Math Club, Binghamton University
May 2011	*"Lickorish-Wallace theorem on 3-manifolds"*,
	Toeholds in Topology Graduate seminar, Binghamton University
Sep 2010	*"Asymptotic dimension of spaces and groups I, II"*,
	Toeholds in Topology Graduate seminar, Binghamton University (2 talks)
Feb 2010	*"What are the fractals and where do we see them"*,
	Undergraduate Math Club, Binghamton University
Oct 2009	*"Introduction to the world of groups"*,
	Undergraduate Math Club, Binghamton University
Sep 2009	*"Introduction to groups generated by automata I, II"*,
	Toeholds in Topology Graduate seminar, Binghamton University (2 talks)
Oct 2006	*"Automata groups from different points of view"*,
	Graduate Student Seminar, Texas A&M University

TEACHING

University of South Florida

MAD 6616   *Algebraic Automata Theory (graduate level)*
Spring 2021

MAT 6932   *Groups Generated by Automata (graduate level)*
Fall 2016

MAT 5932   *Combinatorial and Geometric Group Theory (graduate level)*
Spring 2014, Spring 2018

MTG 5317   *Topology II (graduate level)*
Spring 2013

MAS 5311   *Algebra I (graduate level)*
Fall 2015

MAS 5312   *Algebra II (graduate level)*
Spring 2016

MAT 4930   *Cryprography and Coding Theory (developed course materials)*
Fall 2013, Fall 2014

MAS 4302   *Elementary Abstract Algebra II*
Spring 2017

MTG 4302   *Introduction to Topology*
Spring 2019, Spring 2022

MAS 3105   *Linear Algebra*
Fall 2012, Fall 2013, Spring 2014, Spring 2018, Fall 2018
Fall 2019

MAC 2312   *Calculus II*
Spring 2013, Fall 2018, Fall 2019

MAC 2282   *Engineering Calculus II*
Spring 2015

MAC 2311   *Calculus I (including course coordination)*
Spring 2015, Fall 2016, Spring 2017, Summer 2018, Summer 2019
Summer 2021

MAC 2281   *Engineering Calculus I*
Fall 2014, Fall 2015, Spring 2015, Spring 2016

Binghamton University

Math 130	*Mathematics in Action*	
	Spring 2011 (250 students), Fall 2011 (280 students)	
Math 304	*Linear Algebra*	
	Fall 2009 (44 students), Fall 2010 (50 students)	
Math 330	*Number Systems*	
	Spring 2010 (25 students)	
Math 371	*Ordinary Differential Equations*	
	Fall 2009 (40 students)	
Math 372	*Dynamical Systems*	
	Fall 2010 (36 students)	
Math 375	*Complex Variables*	
	Spring 2012	
Math 461	*Topology I (undergraduate level)*	
	Fall 2011 (21 students)	

Texas A&M University

Math 142	*Business Mathematics II*
	Instructor (Summer 2006)
Math 152	*Calculus II (with Maple)*
	Teacher Assistant (Fall 2007 (honors), Spring 2007, Fall 2005)
Math 253	*Calculus III (with Maple)*
	Teacher Assistant (Fall 2006 (honors), Spring 2005)

Grader for the following courses:

Math 166	*Topics in Contemporary Mathematics II*
Math 308	*Differential Equations*
Math 367	*Basic Concepts of Geometry*
Math 414	*Fourier Series and Wavelets*
Math 416	*Modern Algebra II*
Math 433	*Applied Algebra*
Math 645	*A Survey of Mathematical Problems I*
Math 662	*Applied Algebra (Graduate Course)*

Kyiv Taras Shevchenko University, Ukraine

Abstract Algebra
Teacher Assistant (Spring 2002)

PROFESSIONAL SERVICE

- Associate Editor of the following journals:

  - Journal of Mathematical Cryptology, De Gruyter
  - International Journal of Computer Mathematics: Computer Systems Theory, Taylor&Francis

- Referee for the following journals and conference proceedings:

  - Advances in Mathematics
  - Groups, Geometry and Dynamics
  - Geometriae Dedicata
  - Journal of Modern Dynamics
  - London Mathematical Society Lecture Note Series
  - Journal of Symbolic Computation
  - Pacific Journal of Mathematics
  - STACS 2013 (Symposium on Theoretical Aspects of Computer Science)
  - CiE2014 (Computability in Europe)
  - CiE2015 (Computability in Europe)
  - CiE2016 (Computability in Europe)
  - ISSAC 2016 (The 41-st International Symposium on Symbolic and Algebraic Computation)
  - DLT 2020 (Developments in Language Theory)
  - International Journal of Foundations of Computer Science
  - Theoretical Computer Science
  - Journal of Mathematical Cryptology
  - St. Petersburg Math Journal
  - International Journal of Algebra and Computation
  - Semigroup Forum
  - European Journal of Combinatorics
  - Expositiones Matheamticae
  - Topology Proceedings
  - Contemporary Mathematics
  - Buletinul Academiei de Ştiinţe a Republicii Moldova. Matematica

- Reviewer for the National Science Centre (Narodowe Centrum Nauki - NCN), Poland

- Reviewer for the USF Internal Awards Program

- Reviewer for Mathscinet (since 06/2006, 33 papers reviewed)

- Organizer of a Special Session "Groups and topological dynamics" at the AMS-SMF-EMS Joint International Meeting, Grenoble, France, July 2022

- Organizer of DLT-2022 (Developments in Language Theory) conference, University of South Florida, Tampa, FL, May 2020

- Organizer of 2022 SCMB Workshop on Discrete and Topological Models in Molecular Biology, University of South Florida, Tampa, FL, May 2020

- Organizer and PC-chair of DLT-2020 (Developments in Language Theory) conference, University of South Florida, Tampa, FL, May 2020 (cancelled due to COVID pandemic)

- Organizer of a Special Session "Groups and topological dynamics" at the Joint Meeting of AMS-MAA, Denver, January 2020

- Organizer of "Zassenhaus groups and friends" international conference, University of South Florida, Tampa, FL, April 6-8, 2018

- Organizer of a Special Session "Combinatorial/Geometric/Probabilistic Methods in Group Theory" at the AMS Fall Central Sectional Meeting (#1131), Denton, TX, September 2017

- Organizer of a conference "Geometric and Probabilistic Methods in Group Theory and Dynamical Systems", Texas A&M University, College Station, TX, November 9-12, 2015

- Organizer of a Special Session "New trends in automata groups and semigroups" at the Joint International Meeting of AMS-EMS-PMS (#1111), Porto, June 2015

- Organizer of "Groups and Dynamics Workshop", Texas A&M University, May 6, 2014

- Organizer of "Groups Acting on Rooted Trees and Around" workshop, Insitut Henri Poincaré, Paris, France, February 24-28, 2014

- Organizer of Geometry and Topology seminar at Binghamton University (2011-2012)

- Organizer of Toeholds in Topology seminar for graduate students at Binghamton University (2010-2012)

UNIVERSITY SERVICE

- Associate Chair for Graduate Affairs (January 2020 – present)

  - Overseeing the graduate program
  - Updating the graduate catalog (15 course proposals have been submitted)
  - Submitting the proposal for the Applied Mathematics Graduate Program
  - Supervising teaching assistants
  - Overseeing the registration issues for both undergraduate and graduate students (since January 2021)
  - Scheduling the classes for the Tampa campus at the Math and Stats Department (since January 2021)

- Chair of the graduate committee (since January 2020)

- Member of the School and College Graduate Curriculum Committees (since September 2020)

- Graduate Admissions Director at the Mathematics and Statistics Department at USF (September 2018 – January 2020)

- Developed the curriculum for an undergraduate course on "Cryptography and Coding Theory". Taught to mathematics students at the University of South Florida in Fall 2013 and Fall 2014.

- Advisor of Undergraduate Math Club at Binghamton University (2009-2012)

- Chapter Advisor for Pi Mu Epsilon Honor Society (2010-2012)

STUDENTS

- Elsayed Ahmed (Ph.D., December 2018), USF

- Krystofer Baker (B.S. Honors Thesis, May 2017), USF

- Allen Pennington (M.S., May 2017), USF

- Suzana Milea (M.A., May 2014), USF

- Louis Caponi (M.A., May 2014), USF

- Tracy Stefanovic (B.S. Honors Thesis, 2014), USF

SKILLS

Languages	Ukrainian and Russian (native), English (fluent)
Computer	I have experience working and programming in different Computer Algebra Systems, including GAP, Maple, R Proficient in publishing scientific documents with LaTeX