Curriculum Vitae

ALEX GAVRYUSHKIN

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Contacts

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Education

2009 Ph. D. in Mathematics from Sobolev Institute of Mathematics, Novosibirsk

Thesis advisor: Professor Sergei S. Goncharov

2006 M.S. in Mathematics from Novosibirsk State University (with Honours)

2004 B. S. in Mathematics from Novosibirsk State University (with Honours)

Professional Activity

February 2012–present Research Fellow The University of Auckland (NZ)

Department of Computer Science

September 2009–December 2014 Senior Lecturer Irkutsk State University (RF)

Institute of Mathematics and Computer Science

Awards

2011 Dr of Science Scholarship for three years

(This Award is a Russian analogue of New Zealand's Rutherford Discovery Fellowship)

2009 Siberian Fund for Algebra and Logic Award (2005–2009)

2008 Award for excellence in teaching (at ACM-ICPC North-Eastern European Regional Contest)

2007 Siberian Mathematical Journal Award (from Sobolev Institute of Mathematics)

2006 Best Student Scientific Work Award (from Novosibirsk State University)

2005 Maltsev Award (from Novosibirsk State University)

Recent publications

- A. Gavryushkin and A. Drummond. The space of ultrametric phylogenetic trees. arXiv preprint arXiv:1410.3544. Submitted to Journal of Theoretical Biology in September 2015. Software is available at https://github.com/gavruskin/tauGeodesic
- T. Stadler, T. Vaughan, A. Gavryushkin, S. Guindon, D. Kühnert, G.E. Leventhal, and A. Drummond. How well can the exponential-growth coalescent approximate constant-rate birth-death population dynamics? *Proceedings of the Royal Society B: Biological Sciences*, 282, 1806, 2015.
- P. Gavryushkin, Z. Popov, K. Litasov, and A. Gavryushkin. Unbiased crystal structure prediction of NiSi under high pressure. *Journal of Applied Crystallography*, 48, 3, 906–908, 2015.
- A. Gavryushkin, B. Khoussainov, and F. Stephan. Reducibilities among equivalence relations induced by recursively enumerable structures. *Theoretical Computer Science*, Vol. 612, 137–152, 2015.
- A. Gavryushkin. Decidable models of small theories. *Lobachevskii Journal of Mathematics*, 36, 4, 446–449, 2015.
- A. Gavryushkin, B. Khoussainov, M. Kokho, and J. Liu. Dynamic algorithms for monotonic interval scheduling problem. *Theoretical Computer Science*, Vol. 562, 227–242, 2014.
- A. Gavryushkin and A. Nies. Universality for left-computably enumerable metric spaces. Lobachevskii Journal of Mathematics, 35, 4, 292–294, 2014.
- A. Gavryushkin, B. Khoussainov, M. Kokho, and J. Liu. Dynamic interval scheduling for multiple machines. *ISAAC 2014, Springer LNCS*, Vol. 8889, 235–246, 2014. Extended version to appear in *Algorithmica* in 2016.
- A. Gavryushkin, S. Jain, B. Khoussainov, and F. Stephan. Graphs realised by r. e. equivalence relations. *Annals of Pure and Applied Logic*, 165, 7, 1263–1290, 2014.
- A. Gavryushkin, B. Khoussainov, M. Kokho, and J. Liu. Dynamising interval scheduling: the monotonic case. *Combinatorial Algorithms*, LNCS 8288, 178–189, 2013.
- A. Gavryushkin and B. Khoussainov. On decidable and computable models of theories. Springer LNCS Vol. 7921, 200–209, 2013.
- A. Gavryushkin, S. Jain, B. Khoussainov, and F. Stephan. Graphs realised by r. e. equivalence relations. *The Nature of Computation—CiE*, 110–119, 2013.
- A. Gavryushkin. On constructive models of theories with linear Rudin-Keisler ordering. Journal of Logic and Computation, 22, 4, 793–805, 2012.

Recent invited talks

November	2015	Computational Biology Group Seminar	Seminar talk
		at ETH—Zürich	
February	2015	Matsen Group Seminar	Seminar talk
		at Fred Hutchinson Cancer Research Centr	e
February	2015	Workshop on Networks of Life	Workshop talk
		at the University of Canterbury	
June	2014	Algebra and Mathematical Logic:	Special session talk
		Theory and Applications in Kazan	
November	2013	Randomness Workshop	Workshop talk
		at the University of Auckland	
November	2012	National University of Singapore	Seminar talk
October	2011	Maltsev Meeting in Novosibirsk	Plenary talk
October	2011	Logic Seminar at Cornell University	Seminar talk
September	2011	Southern Wisconsin Logic Colloquium	Seminar talk

Grants

2012 - 2013	Associate Investigator of an FRDF grant from the University of Auckland.
	Contract $\# 2795185$ for $\$200,000$.
2011 - 2013	Principal Investigator and Coordinator of a Russian Government Grant.
	Contract $\# 16.740.11.0567$ for US\$50,000.
2010-2012	Principal Investigator and Coordinator of a Russian Government Grant.
	Contract $\#\Pi 1227$ for US\$65,000.
2006-2010	Participant of a Russian Fund for Fundamental Research Grant.
2003-2009	Participant of a Russian President Grant.

Students

2015 – 2016	Lena Collienne	Intern	The University of Auckland (University of Greifswald)
2015 – 2016	Edwardo Reynolds	Intern	The University of Auckland

Recent teaching

2012 – 2014	The University of Auckland	Discrete Structures in Maths and CS (CompSci 225)
2013 – 2014	Auckland U of Technology	Engineering Mathematics I and II (715001/716001)
2013 – 2013	Auckland U of Technology	Finite Mathematics (715205)
2012 – 2012	Auckland U of Technology	Theory of Computation (717300)
2012 – 2012	The University of Auckland	Software Engineering Theory (SoftEng 211)

Service to Department and University

2013	Auckland-Novosibirsk Workshop on	Co-Chair of the
	Algebra, Logic, Geometry, and Combinatorics	Programme Committee
2009	Maltsev Meeting	Organising Committee
2007	Mathematics in the Modern World	Organising Committee
2007	Domains VIII and Computability Over Continuous Data Types	Organising Committee
2005	Asian Logic Conference	Organising Committee

I am a regular reviewer for AMS Mathematical Reviews and a referee for highly reputable journals and conferences such as

- Genome Biology and Evolution
- $\bullet \ Journal \ of \ Mathematical \ Biology$
- LICS Symposium

This CV: https://gavruskin.github.io/AGcv_short.pdf