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 First Class Honours)
2004	B. S. in Mathematics	from Novosibirsk State University (with First Class 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
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* at ETH—Zürich	Seminar talk
February	2015	*Matsen Group Seminar* at Fred Hutchinson Cancer Research Centre	Seminar talk
February	2015	*Workshop on Networks of Life* at the University of Canterbury	Workshop talk
June	2014	*Algebra and Mathematical Logic: Theory and Applications* in Kazan	Special session talk
November	2013	*Randomness Workshop* at the University of Auckland	Workshop talk
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* University of Wisconsin—Madison	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 # Π1227 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 Algebra, Logic, Geometry, and Combinatorics	Co-Chair of the 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*
- *Journal of Mathematical Biology*
- *LICS Symposium*

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