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Publications

Peer-reviewed papers

- *Computability-theoretic categoricity and Scott families* (with V. Harizanov and D. Turetsky), to appear in *Ann. Pure Applied Logic*.
- *Degrees of bi-embeddable categoricity of equivalence structures* (with N. Bazhenov, D. Rossegger and L. San Mauro), to appear in *Arch. Math. Logic*.
- *Computable bi-embeddable categoricity* (with N. Bazhenov, D. Rossegger and L. San Mauro), to appear in *Algebra Logic*.
- *Bi-embeddability spectra and bases of spectra* (with D. Rossegger and L. San Mauro), to appear in *Math. Logic Quarterly*.
- *Measuring the complexity of reductions between equivalence relations* (with D. Rossegger and L. San Mauro), to appear in *Computability*.
- ***Degree spectra with respect to equivalence relations*** (with P. Semukhin and D. Turetsky), to appear in *Algebra Logic*.
- *Computable bi-embeddable categoricity of equivalence structures* (with N. Bazhenov, D. Rossegger and L. San Mauro), *Proceedings of the 11th Panhellenic Logic Symposium, 2017*, 126–132.
- *Bi-embeddability spectra of structures* (with D. Rossegger and L. San Mauro), *Proceedings of the 11th Panhellenic Logic Symposium, 2017*, 32–38.
- *Reducibility and bi-reducibility spectra of equivalence relations* (with D. Rossegger and L. San Mauro), *Proceedings of the 11th Panhellenic Logic Symposium, 2017*, 83–89.
- *Linear orders realized by c.e. equivalence relations* (with B. Khoussainov, P. Semukhin and D. Turetsky), *J. Symb. Logic*, 81 (2016), 463–482. DOI: 10.1017/jsl.2015.11
- *Categoricity spectra for rigid structures* (with A. Frolov and I. Kalimullin), *Notre Dame J. Formal Logic*, 57 (2016), 45–57. DOI: 10.1215/00294527-3322017
- *Index sets for n -decidable structures categorical relative to m -decidable presentations* (with S. Goncharov, V. Harizanov, O. Kudinov, and D. Turetsky), *Algebra Logic*, 54 (2015), 520–528 (in Russian), 336–341 (English translation). DOI: 10.1007/s10469-015-9353-6
- *Classes of structures with universe a subset of ω_1* (with S. Friedman, J. Knight, and R. Miller), *J. Logic Computation*. 23 (2013) 6 1249–1265. DOI: 10.1093/logcom/ext042

- *On Σ_1^1 equivalence relations over the natural numbers* (with S. D. Friedman), *Math. Logic Quarterly*, 58 (2012), 113–124. DOI: 10.1002/malq.201020063
- ***Isomorphism relations on computable structures*** (with S. D. Friedman, V. Harizanov, J. F. Knight, C. McCoy, A. Montalbán), *J. Symbolic Logic*, 77 (2012), 122–132. DOI: 10.2178/jsl/1327068695
- *Equivalence relations that are Σ_3^0 complete for computable reducibility* (with S. D. Friedman and A. Nies), *Lecture Notes in Computer Science 7456* (2012) 26–33. DOI: 10.1007/978-3-642-32621-9_2
- *Computable embedding problem* (with J. Carson, V. Harizanov, J. F. Knight, S. Quinn, C. Safranski, J. Wallbaum), *Algebra Logic*, 50 (2011), 6, 707–732. DOI: 10.1007/s10469-012-9160-2
- *Classes of Ulm type and coding rank-homogeneous trees in other structures* (with J. F. Knight, A. Melnikov, S. Quinn, C. Safranski), *J. Symbolic Logic* 76 (2011), 846–869. DOI: 10.2178/jsl/1309952523
- ***The effective theory of Borel equivalence relations*** (with S. D. Friedman and A. Törnquist), *Ann. Pure Applied Logic*, 161 (2010), 837–850. DOI: 10.1016/j.apal.2009.10.002
- ***Degrees of categoricity of computable structures*** (with I. Kalimullin and R. Miller), *Arch. Math. Logic*, 49 (2010), 51–67. DOI: 10.1007/s00153-009-0160-4
- *Intrinsic bounds on complexity and definability at limit levels* (with J. Chisholm, S. S. Goncharov, V. Harizanov, J. F. Knight, S. Quinn), *J. Symbolic Logic*, 74 (2009) 3, 1047–1060. DOI: 10.2178/jsl/1245158098
- *Index sets for some classes of structures*, *Ann. Pure Applied Logic*, 157 (2009), 139–147. DOI: 10.1016/j.apal.2008.09.006
- ***Equivalence relations on classes of computable structures*** (with S. D. Friedman), *Lecture Notes in Computer Science 5635* (2009), 198–207. DOI: 10.1007/978-3-642-03073-4_21
- *Algorithmic properties of structures for the languages with two unary function symbols*, *Vestnik NGU*, 8 (2008), 1, 90–101 (in Russian).
- *Algorithmic properties of structures for the languages with two unary function symbols*, *Logic and Theory of Algorithms, Local Proceedings of CiE'08*, 2008, 127–136.
- *Index sets for classes of high rank structures* (with W. Calvert, S. S. Goncharov, J. F. Knight, O. Kudinov, A. S. Morozov, V. Puzarenko), *J. Symbolic Logic*, 72 (2007), 4, 1418–1446. DOI: 10.2178/jsl/1203350796
- *Index sets of decidable structures*, *Siberian Mathematical Journal*, 48 (2007), 5, 939–948. DOI: 10.1007/s11202-007-0097-y
- *Index Sets of Computable Structures with Decidable Theories*, *Lecture Notes in Computer Science*, 4497, (2007) 290–296. DOI: 10.1007/978-3-540-73001-9_30
- *On spectra of computable models*, *Vestnik NGU*, 6 (2006), 6, 69–73 (in Russian).

- *Arithmetical Turing degrees and categorical theories of computable models*, Mathematical Logic in Asia. Proceedings of the 9th Asian Logic Conference, 2006, 58–69.
- *On complexity of categorical theories with computable models*, Vestnik NGU, 5 (2005), 2, 78–86 (in Russian).

■ Non-peer-reviewed papers and editorship

- *Editor of the Special Issue “Mind Mechanism Mathematics”*, Mathematical Structures in Computer Science, March 2018.
- Preface to the Special Issue “Mind Mechanism Mathematics”, Mathematical Structures in Computer Science, March 2018, 338–339. DOI: 10.1017/S0960129517000081
- *Computable model theory* (with V. Harizanov and A. Melnikov), Turing’s Legacy: Developments from Turing’s Ideas in Logic (edited by R. Downey), ASL Lecture Notes in Logic 42 (2014), 124–194. DOI: 10.1017/CBO9781107338579.006

The most important publications are given in **bold**.