LIST OF PUBLICATIONS OF ISTVÁN NÉMETI

Alfréd Rényi Institute of Mathematics
of the Hungarian Academy of Sciences.

1 Books

[3] *Decision problems for equational theories of relation algebras.* **Memoirs of Amer. Math. Soc.** Vol. 126, No. 604, American Mathematical Society, Providence, Rhode Island, 1997. xiv+126pp. IF: 1.018. Andréka, H., Givant, S. and Németi, I.

[2] *Cylindric Set Algebras.* **Lecture Notes in Mathematics** Vol 883, Springer-Verlag, Berlin, 1981. vi + 323 pp. Henkin, L., Monk, J. D., Tarski, A., Andréka, H. and Németi, I.

[1] *Generalization of the concept of variety and quasi-variety to partial algebras through category theory.* **Dissertationes Mathematicae (Rozprawy Math.)** No. 204. PWN - Polish Scientific Publishers, Warsaw, 1983. 51 pp. Andréka, H. and Németi, I.

2 Book edited

[2] *Cylindric-like algebras and algebraic logic.* **Bolyai Society Mathematical Studies** Vol. 22, Springer Verlag, Berlin, 2012. 478 pp. Editors: Andréka, H., Ferenczi, M. and Németi, I.

[1] *Algebraic Logic.* **Colloq. Math. Soc. J. Bolyai** Vol. 54, North-Holland, Amsterdam, 1991. vi + 746 pp. Editors: Andréka, H., Monk, J. D. and Németi, I.

3 Journal Articles, refereed

[86] *Ultraproducts of continuous posets.* **Algebra Universalis** 76,2 (2016), 231-235. Andréka, H., Gyenis, Z. and Németi, I.

[85] *Faster than light motion does not imply time travel.* **Classical and Quantum Gravity** 21 (2014), 095005 (11pp). Andréka, H., Madarász, J. X., Németi, I., Stannett, M. and Székely, G. IF(2013): 3.103

[84] *Using Isabelle/HOL to verify first order relativity theory.* **Journal of Automated Reasoning** 52,4 (2014), 361-378. Németi, I. and Stannett, M. IF(2012): 0.567

[83] *A note on 'Einstein's special relativity beyond the speed of light by James M. Hill and Barry J. Cox'.* **Proc. R. Soc. A.** 469 (2013), 2154. Andréka, H., Madarász, J. X., Németi, I. and Székely, G. IF(2011): 1.971

[82] *A non representable infinite dimensional quasi-polyadic equality algebra with a representable cylindric reduct.* **Studia Sci. Math. Hungar.** 50,1 (2013), 1-16. Andréka, H., Németi, I. and Sayed Ahmed, T. IF(2011): 0.299

[81] *A logic road from special relativity to general relativity.* **Synthese** 186,3 (2012), 633-649. Andréka, H., Madarász, J. X., Németi, I. and Székely, G. IF(2010): 0.676

[80] *The equational theory of Kleene lattices.* **Theoretical Computer Science** 412 (2011), 7099-7108. Andréka, H., Mikulás, Sz. and Németi, I. IF(2010): 0.838

[79] *On logical analysis of relativity theories.* **Hungarian Philosophical Review** 54,4 (2010), 204-222. Andréka, H., Madarász, J. X., Németi, I. and Székely, G.

[78] *Epimorphisms in cylindric algebras and definability in finite variable logic.* **Algebra Universalis** 61,3-4 (2009), 261-282. IF: 0.245. Andréka, H., Comer, S. C., Madarász, J. X., Németi, I. and Sayed-Ahmed, T.

[77] *General relativistic hypercomputing and foundation of mathematics.* **Natural Computing** 8,3 (2009), 499-516. Andréka, H., Németi, I. and Németi, P.

[76] *Weakly higher order cylindric algebras and finite axiomatization of the representables.* **Studia Logica** 91,1 (2009), 53-62. Németi, I. and Simon, A.

[75] *A twist in the geometry of rotating black holes: seeking the cause of acausality.* **General Relativity and Gravitation** 40,9 (2008), 1809-1823. IF: 1.8. Andréka, H., Németi, I. and Wüthrich, C.

[74] *Axiomatizing relativistic dynamics without conservation postulates.* **Studia Logica** 89,2 (2008), 163-186. Andréka, H., Madarász, J. X., Németi, I. and Székely, G.

[73] *Omitting types for finite variable fragments and complete representations of algebras.* **Journal of Symbolic Logic** 73,1 (2008), 65-89. IF: 0.61. Andréka, H., Németi, I. and Sayed-Ahmed, T.

[72] *Relativistic computers and the Turing barrier.* **Journal of Applied Mathematics and Computation** 178 (2006), 118-142. IF: 0.567. Németi, I. and Dávid, Gy.

[71] *Twin Paradox and the logical foundation of relativity theory.* **Foundation of Physics** 36,5 (2006), 681-714. IF: 0.573. Madarász, J. X., Németi, I. and Székely, G.

[70] *Mutual definability does not imply definitional equivalence, a simple example.* **Mathematical Logic Quarterly** 51,6 (2005), 591-597. IF: 0.386. Andréka, H., Madarász, J. X. and Németi, I.

[69] *Algebras of relations of various ranks, some current trends and applications.* **Journal of Relational Methods in Computer Science** 1 (2004), 27-49. Andréka, H., Madarász, J. X. and Németi, I.

[68] *Non-Turing computations via Malament-Hogarth space-times.* **International Journal of Theoretical Physics** 41,2 (2002), 341-370. IF: 0.52. Etesi, G. and Németi, I.

[67] *On neat reducts of algebras of logic.* **Studia Logica** 68,2 (2001), 229-262. Németi, I. and Sayed-Ahmed, T.

[66] *Free Boolean algebras with closure operators and a conjecture of Henkin, Monk, and Tarski.* **Studia Sci. Math. Hungar.** 38 (2001), 273-278. IF: 0.118. Madarász, J. X. and Németi, I.

[65] *Representability of pairing relation algebras depends on your ontology.* **Fundamenta Informaticae** 44,4 (2000), 397-420. Kurucz, Á. and Németi, I.

[64] *On the equational theory of representable polyadic equality algebras.* **Journal of Symbolic Logic** 65,3 (2000), 1143-1167. IF: 0.35. Németi, I. and Sági, G.

[63] *Finite algebras of relations are representable on finite sets.* **Journal of Symbolic Logic** 64,1 (1999), 243-267. IF: 0.296. Andréka, H., Hodkinson, I. and Németi, I.

[62] *Modal languages and bounded fragments of predicate logic.* **Journal of Philosophical Logic** 27 (1998), 217-274. Andréka, H., van Benthem, J. and Németi, I.

[61] *Persistent properties and an application to algebras of logic.* **Algebra Universalis** 38 (1997), 141-149. IF: 0.275. Andréka, H., Givant, S., Németi, I. and Simon, A.

[60] *Notions of density that imply representability in algebraic logic.* **Annals of Pure and Applied Logic** 91 (1998), 93-190. IF: 0.406. Andréka, H., Givant, S., Mikulás, Sz., Németi, I. and Simon, A.

[59] *Relativised quantification: some canonical varieties of sequence-set algebras.* **Journal of Symbolic Logic** 63,1 (1998), 163-184. IF: 0.295. Andréka, H., Goldblatt, R. and Németi, I.

[58] *On the equational theory of representable polyadic equality algebras.* (Extended abstract) **Logic Journal of the IGPL** 6,3 (1998), 3-15. Németi, I. and Sági, G.

[57] *Relation algebras from cylindric and polyadic algebras.* **Logic Journal of the IGPL** 5,4 (1997), 575-588. Németi, I. and Simon, A.

[56] *Strong representability of fork algebras, a set theoretic foundation.* **Journal of the IGPL** 5,1 (1997), 3-28. Németi, I.

[55] *Axiomatization of identity-free equations valid in relation algebras.* **Algebra Universalis** 35 (1996), 256-264. IF: 0.166. Andréka, H. and Németi, I.

[54] *Decidable and undecidable logics with a binary modality.* **Journal of Logic, Language and Information** 4 (1995), 191-206. Kurucz, Á., Németi, I., Sain, I. and Simon, A.

[53] *Taming Logic.* **Journal of Logic, Language, and Information** 4 (1995), 207-226. Marx, M., Mikulás, Sz. and Németi, I.

[52] *Back and forth between modal logic and classical logic.* **Journal of the IGPL** 3,5 (1995), 685-720. Andréka, H., van Benthem, J. and Németi, I.

[51] *Expressibility of properties of relations.* **Journal of Symbolic Logic** 60,3 (1995), 970-991. IF: 0.311. Andréka, H., Duentsch, I. and Németi, I.

[50] *Perfect extensions and derived algebras.* **Journal of Symbolic Logic** 60,3 (1995), 775-796. IF: 0.311. Andréka, H., Givant, S. and Németi, I.

[49] *Binary relations and permutation groups.* **Mathematical Logic Quarterly** 41 (1995), 197-216. IF: 0.187. Andréka, H., Düntsch, I. and Németi, I.

[48] *Undecidability of the equational theories of some classes of residuated Boolean algebras with operators.* **Bulletin of the IGPL** 3,1 (1995), 93-107. Németi, I., Sain, I. and Simon, A.

[47] *Connections between axioms of set theory and basic theorems of universal algebra.* **Journal of Symbolic Logic** 59,3 (1994), 912-922. IF: 0.204. Andréka, H., Kurucz, Á. and Németi, I.

[46] *The lattice of varieties of representable relation algebras.* **Journal of Symbolic Logic** 59,2 (1994), 631-661. IF: 0.204. Andréka, H., Givant, S. and Németi, I.

[45] *Undecidable varieties of semilattice-ordered semigroups, of Boolean algebras with operators, and logics extending Lambek calculus.* **Bulletin of IGPL** 1/1 (1993), 91-98. Kurucz, Á., Németi, I., Sain, I. and Simon, A.

[44] *A nonpermutational integral relation algebra.* **Michigan Math. J.** 39 (1992), 371-384. IF: 0.253. Andréka, H., Düntsch, I. and Németi, I.

[43] *Algebraizations of quantifier logics, an introductory overview.* **Studia Logica** 50, 3-4 (1991), 485-569. Special issue on Algebraic Logic (ed.s: W. J. Blok and D. Pigozzi) Németi, I.

[42] *Splitting in relation algebras.* **Proceedings of Amer. Math. Soc.** 111,4 (1991), 1085–1093. IF: 0.276. Andréka, H., Maddux, R. and Németi, I.

[41] *Free algebras in discriminator varieties.* **Algebra Universalis** 28 (1991), 401-447. IF: 0.129. Andréka, H., Jónsson, B. and Németi, I.

[40] *On the strength of temporal proofs.* **Theoretical Computer Science** 80 (1991), 125-151. IF: 0.422. Shorter version appeared in Lecture Notes in Computer Science Vol 379, 1989. Andréka, H., Németi, I. and Sain, I.

[39] *Weak cylindric set algebras and weak subdirect indecomposability.* **Journal of Symbolic Logic** 55,2 (1990), 577–588. IF: 0.376. Andréka, H., Németi, I. and Thompson, R. J.

[38] *A system of logic for partial functions under existence–dependent Kleene equality.* **Journal of Symbolic Logic** 53 (1988), 834–839. IF: 0.355. Andréka, H., Craig, W. and Németi, I.

[37] *On varieties of cylindric algebras with applications to logic.* **Annals of Pure and Applied Logic** 36 (1987), 235–277. Németi, I.

[36] *Decidability of relation algebras with weakened associativity.* **Proc. Amer. Math. Soc.** 100,2 (1987), 340–344. IF: 0.271. Németi, I.

[35] *A unifying theorem for algebraic semantics and dynamic logics.* **Information and Computation** 72,1 (1987), 31–45. IF: 0.735. Andréka, H., Guessarian, I. and Németi, I.

[34] *A non–representable cylindric algebra with pairing function.* **Algebra Universalis** 22 (1986), 117–119. IF: 0.076. Németi, I.

[33] *On the number of generators of cylindric algebras.* **Journal of Symbolic Logic** 50,4 (1985), 865–873. IF: 0.486. Andréka, H. and Németi, I.

[32] *Cylindric–relativized set algebras have strong amalgamation.* **Journal of Symbolic Logic** 50 (1985), 689–700. IF: 0.486. Németi, I.

[31] *Remark on one–sided A–ideals of semigroups.* **Math. Slovaca** 33,2 (1983), 231–235. Andréka, H., Németi, I. and Sulka, R.

[30] *The class of neat–reducts of cylindric algebras is not a variety but is closed w.r.t. HP.* **Notre Dame J. of Formal Logic** 24,3 (1983), 399–409. Németi, I.

[29] *On notions of factorization systems and their applications to cone–injective subcategories.* **Periodica Math. Hungar.** 13,3 (1982), 229–235. Németi, I.

[28] *Every free algebra in the variety generated by the representable dynamic algebras is separable and representable.* **Theoretical Computer Science** 17 (1982), 343–347. IF; 0.422. Németi, I.

[27] *A complete logic for reasoning about programs via nonstandard model theory.* **Theoretical Computer Science** 17 (1982), Part I in No 2, pp.193–

212, Part II in No 3, pp.259–278. IF: 0.422. Andréka, H., Németi, I. and Sain, I.

[26] *Quasivarieties of partial algebras – a unifying approach towards a two–valued model theory for partial algebras.* **Studia Sci. Math. Hungar.** 16 (1981), 325–372. Andréka, H., Burmeister, P. and Németi, I.

[25] *Dimension complemented and locally finite dimensional cylindric algebras are elementarily equivalent.* **Algebra Universalis** 13 (1981), 157–163. Andréka, H. and Németi, I.

[24] *HSPK is an equational class, without the axiom of choice.* **Algebra Universalis** 13 (1981), 164–166. Andréka, H. and Németi, I.

[23] *Similarity types, pseudosimple algebras, and congruence representation of chains.* **Algebra Universalis** 13 (1981), 293–306. Andréka, H. and Németi, I.

[22] *Does $SPK \supseteq PSK$ imply axiom of choice?.* **Comm. Math. Univ. Carolinae.** 21,4 (1980), 699–706. Andréka, H. and Németi, I.

[21] *On systems of varieties definable by schemes of equations.* **Algebra Universalis** 11 (1980), 105–116. Andréka, H. and Németi, I.

[20] *Injectivity in categories to represent all first order formulas.* **Demonstratio Mathematica** 12 (1979), 717–732, Andréka, H. and Németi, I.

[19] *Formulas and ultraproducts in categories.* **Beiträge zur Algebra und Geometrie** 8 (1979), 133–151. Andréka, H. and Németi, I.

[18] *Neat reducts of varieties.* **Studia Sci. Math. Hungar.** 13 (1978), 47–51. Andréka, H. and Németi, I.

[17] *From hereditary classes to varieties in abstract model theory and partial algebras.* **Beiträge zur Algebra und Geometrie** 7 (1978), 69–78. Németi, I.

[16] *Los lemma holds in every category.* **Studia Sci. Math. Hungar.** 13 (1978), 361–376. Andréka, H. and Németi, I.

[15] *The generalised completeness of Horn predicate logic as a programming language.* **Acta Cybernetica** Tom 4, Fasc 1 (Szeged 1978), 3–10. Andréka, H. and Németi, I.

[14] *On universal algebraic construction of logics.* **Studia Logica** 36,1–2 (1977), 9–47. Andréka, H., Gergely, T. and Németi, I.

[13] *On the adequateness of predicate logic programming.* **AISB European Newsletter** Issue 23 (1976), 30–32. Andréka, H. and Németi, I.

[12] *On a proof of Shelah.* **Bulletin de l'Academie Polonaise des Sciences (Series Math.)** 27 (1976), 1–7. Andréka, H., Dahn, B. I. and Németi, I.

[11] *Remarks on free products in regular varieties and sink–complemented subalgebras.* **Studia Sci. Math. Hung.** 10 (1975), 23–31, Andréka, H. and Németi, I.

[10] *Logical foundations for a general theory of systems.* **Acta Cybernetica** Tom 2, Fasc 3 (Szeged 1975), 261–276. Gergely, T. and Németi, I.

[9] *A simple, purely algebraic proof of the completeness of some first order logics.* **Algebra Universalis** 5 (1975), 8–15. Andréka, H. and Németi, I.

[8] *Many–sorted languages and their connection with higher order languages.* (In Russian) (Mnogoszortnüje jázüki i ih szvjáz sz jázükámi n–ovo porjádká.) **Kibernyetyika** 75,4 (Kijev 1975), 86–92. Andréka, H., Gergely, T. and Németi, I.

[7] *On some questions of higher order logic.* (In Hungarian) (Az ennedrendű nyelvek néhány kérdéséről.) **Matematikai Lapok** 24 (1975), 63–94. Andréka, H., Gergely, T. and Németi, I.

[6] *Subalgebra systems of algebras with finite and infinite, regular and singular arities.* **Annales Univ. Budapest. Eötvös Sec. Math.** 17 (1974), 103–118. Andréka, H. and Németi, I.

[5] *Sufficient and necessary condition for the completeness of a calculus.* **Zeitschr. Math. Logic u. Grundl. Math.** Bd 20 (1974), 433–434. Andréka, H., Gergely, T. and Németi, I.

[4] *On some questions of n–th order logic.* (In Russian) (O nyekotorüh váprószáh jázükovo n–ovo porjádká. I–II.) **Kibernyetyika** 74/5, 74/6 (Kijev 1974), 61–67, 77–83. Andréka, H., Gergely, T. and Németi, I.

[3] *On the equivalence of sets definable by satisfaction and ultrafilters.* **Studia Sci. Math. Hungar.** 8 (1973), 463–467. Andréka, H. and Németi, I.

[2] *Notes on maximal congruence relations, automata and related topics.* **Acta Cybernetica** Tom 2, Fasc 1 (Szeged 1973), 71–88. Andréka, H., Horváth, S. and Németi, I.

[1] *Hierarchic partition of large scale systems and its application for power system study.* **Acta Technica** 71 (1971), 285–303. Bogdánfy, G. and Németi, I.

4 Invited Book Chapters

[18] *Comparing theories: the dynamics of changing vocabulary. A case-study in relativity theory.* In: **Johan van Benthem on Logical and Informational Dynamics** A. Baltag, S. Smets eds, Springer Series Outstanding contrbutions to logic Vol 5 Springer Verlag, 2014. pp.143-172. Andréka, H. and Németi, I.

[17] *The development of symbolic logic in Hungary.* In: **Logic in Central and Eastern Europe: History, Science and Discourse** A. Schumann ed, University Press of America, 2012. pp.201-216. Máté, A., Andréka, H. and Németi, I.

[16] *Reducing first-order logic to Df_3, free algebras.* In: **Cylindric-like algebras and algebraic logic** Andréka, H., Ferenczi, M., Németi, I. eds, Springer Verlag, Bolyai Society Mathematical Studies 22, 2012. pp.15-35. Andréka, H. and Németi, I.

[15] *Vienna Circle and Logical Analysis of Relativity Theory.* In: **The Vienna Circle in Hungary (Der Wiener Kreis in Ungarn)** Máte, A., Rédei, M., Stadler, F. eds, Veröffentlishungen des Instituts Wiener Kreis, Collegium Logicum Band 16, 2011. pp.247-268. Andréka, H., Madarász, J. X., Németi, I., Németi, P. and Székely, G.

[14] *Visualizing ideas about Gödel-type rotating universes.* In: **Gödel-type spacetimes: history and new developments** Scherfner, M., Plaue, M. eds, Kurt Godel Society, Collegium Logicum Vol X, 2010. pp.77-127. Németi, I., Madarász, J. X., Andréka, H. and Andai, A.

[13] *Logic of space-time and relativity theory.* In: **Handbook of Spatial Logics**, Eds.: Aiello, M., Pratt-Hartmann, I., Benthem, J. F. A. K. van, Springer Verlag, 2007. pp. 607-711. Andréka, H., Madarász, J. X. and Németi, I.

[12] *First-order logic foundation of relativity theories.* In: **New Logics for the XXIst Century II**, Mathematical Problems from Applied Logics,

International Mathematical Series Vol 5, Eds.: Gabbay, D., Goncharov, S. and Zakharyaschev, M., Springer Verlag, 2007. pp. 217-252. Madarász, J. X., Németi, I., and Székely, G.

[11] *Logical axiomatizations of space-time. Samples from the literature.* In: **Non-Euclidean Geometries: János Bolyai Memorial Volume** (Prékopa, A., Molnár, E. eds), Mathematics and Its Applications Vol. 581, Springer Verlag, 2006. pp. 155-185. Andréka, H., Madarász, J. X. and Németi, I.

[10] *Logical analysis of relativity theories.* In: **First-order Logic Revisited** (Hendricks et al. eds), Logos Verlag, Berlin, 2004. pp.7-36. Andréka, H., Madarász, J. X. and Németi, I.

[9] *On generalizing the logic-approach to space-time towards general relativity: first steps.* In: **First-order Logic Revisited** (Hendricks et al. eds), Logos Verlag, Berlin, 2004. pp.225-268. Madarász, J. X., Németi, I. and Tőke, Cs.

[8] *Relational Algebras.* In: **The Concise Handbook of Algebra**. Editors: Mikhalev, A. V. and Pilz, G. F. Kluwer Akademic Publishers, Dordrecht, Boston, London, 2002. pp. 478-482. Andréka, H., Madarász, J. X. and Németi, I.

[7] *Algebraic Logic.* In: Supplement III of **Encyclopaedia of Mathematics.** Editor: Hazewinkel, M. Kluwer Academic Publishers, 2002. pp.31-34. Andréka, H., Madarász, J. X. and Németi, I.

[6] *Algebraic Logic.* In: **Handbook of Philosophical Logic**, Vol. 2, second edition, eds. D. M. Gabbay and F. Guenthner, Kluwer Academic Publishers, 2001. pp. 133-247. Andréka, H., Németi, I. and Sain,I.

[5] *Fork Algebras in Usual and in Non–well–founded Set Theories (An overview).* In: **Logic at Work** (ed. E. Orlowska), Physica-Verlag, 1999. pp.669-694. Németi, I. and Sain, I.

[4] *Submodel preservation theorems in finite variable fragments.* In: **Modal Logic and Process Algebra. A Bisimulation Perspective**. Eds: Ponse, A. de Rijke, M. and Venema, Y. CSLI Lecture Notes No. 53, CSLI Publications, 1995. pp.1-11. Andréka, H., van Benthem, J. and Németi, I.

[3] *Effective temporal logics of programs.* In: **Time and Logic, a computational approach**, eds: Bolc, L. and Szalas, A., UCL Press, London, 1995. pp.51-129. Andréka, H., Goranko, V., Mikulás, Sz., Németi, I. and Sain, I.

[2] *General algebraic logic: a perspective on "what is logic".* In: **What is a logical system**, ed: D. M. Gabbay, Clarendron Press, Oxford, 1994. pp.393-444. Andréka, H. and Németi, I.

[1] *Some new landmarks on the roadmap of two dimensional logics.* In: **Logic and Information Flow**, ed.: J. van Eijck and A. Visser, MIT Press, Cambridge, 1994. pp. 163-169. Andréka, H., Németi, I. and Sain, I.

5 Book Chapters

[8] *Végesen axiomatizált cilindrikus Gödel-Bernays halmazelmélet. (Finitely axiomatized cylindric Gödel-Bernays set theory).* In: **Nehogy érvgyűlölők legyünk: tanulmánykötet Máte András 60. születésnapjára. (Essays dedicated to András Máté on the occasion of his 60th birthday)**, Zvolenszky, Zs., Molnár, A., Mekis, P., Markovich, R., Jellinek, S., Gömöri, M., Bitai, T. eds, L'Harmattan, Budapest, 2013. pp.184-192. Andréka, H. and Németi, I.

[7] *Residuated Kleene Algebras.* In: **Logic and program semantics. Essays dedicated to Dexter Kozen on the occasion of his 60th birthday**, R. I. Constable and A. Silva eds, Lecture Notes in Computer Science Vol. 7230, Springer-Verlag, Berlin, 2012. pp.35-61. Andréka, H. Mikulás, Sz. and Németi, I.

[6] *Investigations in Arrow Logic.* In: **Arrow Logic and Multi-Modal Logic**, M. Marx, L. Pólos, and M. Masuch eds, CSLI Publications, Stanford, California, 1996. pp.35-61. Marx, M., Mikulás, Sz., Németi, I. and Sain, I.

[5] *Causes and remedies for undecidability in arrow logics and in multimodal logics.* **Arrow Logic and Multi-Modal Logic**, M. Marx, L. Pólos, and M. Masuch eds, CSLI Publications, Stanford, California, 1996. pp.63-99. Andréka, H., Kurucz, Á., Németi, I., Sain, I. and Simon, A.

[4] *Fine-structure analysis of first order logic.* **Arrow Logic and Multi-Modal Logic**, M. Marx, L. Pólos, and M. Masuch eds, CSLI Publications, Stanford, California, 1996. pp.221-247. Németi, I.

[3] *Direct limits and filtered colimits are strongly equivalent in all categories.* **Algebra and its applications**, Banach Center Publications Vol 9, PWN – Polish Scientific Publishers, Warszawa 1980. pp.75–88. Andréka, H. and Németi, I.

[2] *On the role of general system theory in the cognitive process.* In: **Progress in Cybernetics and System Research**, Vol 2. Hemisphere Publishing Corporation, 1975. pp.137–150. Gergely, T. and Németi, I.

[1] *Logical foundations for the formalization and application of general system theory.* (In Hungarian) (Az általános rendszerelmélet formalizálásának és alkalmazásának logikai alapjai.) In: **System Theory Research** (Rendszerkutatás). Publisher for Economics and Law (Közgazdasági és Jogi Könyvkiadó), Budapest 1973. pp.307–357. Gergely, T. and Németi, I.

6 Proceedings, refereed

[26] *Can general relativistic computers break the Turing barrier?.* In: **Logical Approaches to Computational Barriers** (Proc. Conf. CiE 2006, Swansea, UK, July 2006) Eds.: Beckmann, A., Berger, U., Löwe, B. and Tucker, J. V., Lecture Notes in Computer Science Vol 3988, Springer–Verlag, Berlin, 2006. pp.398-412. Németi, I. and Andréka, H.

[25] *Decidable Logics of the Dynamic Trend, and Relativized Relation Algebras.* In: **Logic Colloquium'92**, eds: Csirmaz, L., Gabbay, D. and de Rijke, M. Studies in Logic, Language and Computation, CSLI Publications, 1995. pp.165-175. Mikulás, Sz., Németi, I. and Sain, I.

[24] *Decidable versions of first order logic and cylindric-relativized set algebras.* In: **Logic Colloquium'92** (Proc. Veszprém, Hungary 1992), eds: Csirmaz, L., Gabbay, D. M. and de Rijke, M., Studies in Logic, Language and Computation, CSLI Publications, 1995. pp.177-241. Németi, I.

[23] *Exactly which logics touched by the dynamic trend are decidable?.* In: **Proceedings of 9th Amsterdam Colloquium** (Dec.14-17, 1993), ILLC, Department of Philosophy, University of Amsterdam, 1994. Eds: P. Dekker and M. Stokhof. pp.67-86. Andréka, H., Kurucz, Á., Németi, I., Sain, I. and Simon, A.

[22] *Craig property of a logic and decomposability of theories.* In: **Proceedings of 9th Amsterdam Colloquium** (Dec.14-17, 1993), ILLC, Department of Philosophy, University of Amsterdam, 1994. Eds: P. Dekker and M. Stokhof. pp.87-93. Andréka, H., Németi, I. and Sain, I.

[21] *Applying algebraic logic to logic.* In: **Algebraic methodology and software technology** (AMAST'93, Proc. Twente, The Netherlands, June

1993), Nivat, M., Rattray, C., Rus, T. and Scollo, G. eds., Springer-Verlag, London, 1994. pp.7-28. Andréka, H., Németi, I. and Sain, I.

[20] *On Jónsson's clones of operations on binary relations.* In: **Algebraic Logic** (Coll. Math. Soc. J. Bolyai Vol. 54), North–Holland, 1991. pp.431–442. Andréka, H. and Németi, I.

[19] *On cylindric algebraic model theory.* In: **Algebraic Logic and Universal Algebra in Computer Science** (Proc. Conf. Ames 1988) Lecture Notes in Computer Science Vol 425, Springer–Verlag, Berlin, 1990. pp.37–76. Németi, I.

[18] *Relatively free relation algebras.* (Extended abstract) In: **Algebraic Logic and Universal Algebra in Computer Science** (Proc. Conf. Ames 1988) Lecture Notes in Computer Science Vol 425, Springer–Verlag, Berlin, 1990. pp.1–14. Andréka, H., Jónsson, B. and Németi, I.

[17] *On the strength of temporal proofs.* In: **Mathematical Foundations of Computer Science'89** (Proc. Porabka–Kozubnik, Poland, 1989) Eds.: Kreczmar, A. and Mirkowska, G. Lecture Notes in Computer Science Vol 379, Springer–Verlag, Berlin, 1989. pp.135–144. Andréka, H., Németi, I. and Sain, I.

[16] *Clones of operations on relations.* In: **Universal Algebra and Lattice Theory** (Proc. Conf. Charleston 1984) Lecture Notes in Mathematics Vol 1149, Springer–Verlag, Berlin, 1985. pp.7–21. Andréka, H., Comer, S. D. and Németi, I.

[15] *Importance of universal algebra for computer science.* In: **Universal algebra and its links with logic, algebra, combinatorics, and computer science** (Proc. of the "25th Arbeitstagung über Allgemeine Algebra", Darmstadt 1983) Eds.: Burmeister, P., Ganter, B., Herrman, C., Keimel, K., Poguntke, W. and Wille, R. Research and Exposition in Math. Vol 4, Heldermann Verlag, Berlin, 1984. pp.204–215. Andréka, H. and Németi, I.

[14] *Nonstandard runs of Floyd–provable programs.* In: **Logics of Programs and their Applications** (Proc. Conf. Poznan 1980) Ed.: Salwicki, A. Lecture Notes in Computer Science Vol 148, Springer–Verlag, Berlin, 1983. pp.186–204. Németi, I.

[13] *Dynamic algebras of programs.* In: **Fundamentals of Computation Theory'81** (Proc. Conf. Szeged 1981) Ed.: Gécseg, F. Lecture Notes in Com-

puter Science Vol 117, Springer–Verlag, Berlin, 1981. pp.281–290. Németi, I.

[12] *Some universal algebraic and model theoretic results in computer science.* In: **Fundamentals of Computation Theory'81** (Proc. Conf. Szeged 1981) Ed.: Gécseg, F. Lecture Notes in Computer Science Vol 117, Springer–Verlag, Berlin, 1981, pp.16–23. Andréka, H. and Németi, I.

[11] *Nonstandard dynamic logic.* (Invited paper.) In: **Logics of Programs** (Proc. Conf. New York, May 1981) Ed.: Kozen, D. Lecture Notes in Computer Science Vol 131, Springer–Verlag, Berlin, 1982. pp.311–348. Németi, I.

[10] *Which finite cylindric algebras are generated by a single element?.* In: **Finite Algebra and Multiple–valued Logic** (Proc. Coll. Szeged 1979) Colloq. Math. Soc. J. Bolyai Vol 28, North–Holland, Amsterdam, 1981. pp.23–39. Andréka, H. and Németi, I.

[9] *A characterization of Floyd provable programs.* In: **Mathematical Foundations of Computer Science'81** (Proc. Conf. Strbské Pleso, Czechoslovakia 1981). Eds.: Gruska, J. and Chytil, M. Lecture Notes in Computer Science Vol 118, Springer–Verlag, Berlin, 1981. pp.162–171. Andréka, H., Németi, I., and Sain, I.

[8] *Connections between cylindric algebras and initial algebra semantics of CF languages.* In: **Mathematical Logic in Computer Science** (Proc. Coll. Salgótarján 1978) Eds.: Dömölki, B. and Gergely, T., Colloq. Math. Soc. J. Bolyai Vol 26, North–Holland, Amsterdam, 1981. pp.561–605. Németi, I.

[7] *A general axiomatizability theorem formulated in terms of cone–injective subcategories.* In: **Universal Algebra** (Proc. Coll. Esztergom 1977) Colloq. Math. Soc. J. Bolyai Vol 29, North–Holland, Amsterdam, 1981. pp.13–35. Andréka, H. and Németi, I.

[6] *Cone–implicational subcategories and some Birkhoff–type theorems.* In: **Universal Algebra** (Proc. Coll. Esztergom 1977) Colloq. Math. Soc. J. Bolyai Vol 29, North–Holland, Amsterdam, 1981. pp.535–578. Németi, I. and Sain, I.

[5] *Model theoretical semantics for many–purpose languages and language hierarchies.* In: **Computational Linguistics** (Proc. 8th Int. Conf. Tokyo 1980) Tokyo, 1980. pp.213–219. Andréka, H., Gergely, T. and Németi, I.

[4] *Completeness problems in verification of programs and program schemes.* In: **Mathematical Foundations of Computer Science'79** (Proc. Conf. Olomouc Czechoslovakia 1979), Ed.: Becvar, J. Lecture Notes in Computer Science Vol 74, Springer–Verlag, Berlin, 1979. pp.208–218. Andréka, H., Németi, I. and Sain, I.

[3] *Henkin–type semantics for program schemes to turn negative results to positive.* In: **Fundamentals of Computation Theory'79** (Proc. Conf. Berlin 1979) Ed.: L. Budach, Akademie Verlag, Berlin, 1979. Band 2, pp.18–24. Andréka, H., Németi, I. and Sain, I.

[2] *Reduced products in categories.* In: **Contributions to General Algebra** (Proc. Conf. Klagenfurt 1978) Verlag Johannes Heyn, 1979. pp.25–45. Andréka, H., Makai, E., Márki, L. and Németi, I.

[1] *On the congruence lattice of pseudosimple algebras.* In: **Contributions to Universal Algebra** (Proc. Coll. Szeged 1975) Colloq. Math. Soc. J. Bolyai Vol 17, North–Holland, Amsterdam, 1977. pp.15–20. Andréka, H. and Németi, I.

7 Conference volumes, refereed

[6] *Decidability, undecidability, and Gödel incompleteness in relativity theory.* In: **Proceedings of the Satellite Workshops of UC2011**, (Stannett, M., Makowiec, D., Lawniczak, A. T., Di Stefano, B. N. eds) TUCS Lecture Notes 14, Turku Centre for Computer Science, Turku, Finland, 2011. ISBN 978-952-12-2602-1. pp.61-78. Andréka, H., Madarász, J. X. and Németi, I..

[5] *Closed timelike curves in relativistic computation.* In: **Proceedings of the Satellite Workshops of UC2011**, (Stannett, M., Makowiec, D., Lawniczak, A. T., Di Stefano, B. N. eds) TUCS Lecture Notes 14, Turku Centre for Computer Science, Turku, Finland, 2011. ISBN 978-952-12-2602-1. pp.155-171. Andréka, H., Németi, I. and Székely, G.

[4] *A logical investigation of inertial and accelerated observers in flat spacetime.* In: **Kalmár Workshop on Logic and Computer Science**, (Gécseg, F. Csirik, J. and Turán, Gy. eds) Department of Informatics, University of Szeged, Szeged, Hungary, 2003. pp.45-57. Andréka, H., Madarász, J. X., Németi, I. and Székely, G.

[3] *Decidability of weakened versions of first-order logic.* In: **Logic at Work** (Proc. Conf. Amsterdam, December 1992), University of Amsterdam, 1992. Németi, I.

[2] *Investigations in arrow logics.* In: **Logic at Work** (Proc. Conf. Amsterdam, December 1992), University of Amsterdam, 1992. Marx, M., Mikulás, Sz., Németi, I. and Sain, I.

[1] *Associativity implies undecidability in arrow logics.* In: **Logic at Work** (Proc. Conf. Amsterdam, December 1992), University of Amsterdam, 1992. Gyuris, V., Kurucz, Á., Németi, I. and Sain, I.

8 Short papers, refereed

[5] *New physics and hypercomputation.* In: **SOFSEM 2006: Theory and Practice of Computer Science** (32nd Conf. on Current Trends in Theory and Practice of Computer Science, Merin, Czech Republic, January 2006), eds: Wiedermann, J., Tel, G., Pokorny, J. Bielikova, M. and Stuller, J., Lecture Notes in Computer Science Vol 3831, Springer Verlag, 2006, Invited talks section, p.63. Németi, I. and Andréka, H.

[4] *On the finitization problem of relation algebras.* **Bulletin of Section of Logic** 26,3 (1997), 139-143. Madarász, J. X., Németi, I. and Sági, G.

[3] *Ontology can turn negative results to positive.* (An overview of recent results) **Bulletin of Section of Logic** 25,1 (1996), 29-40. Németi, I.

[2] *Fork Algebras in Usual and in Non–well–founded Set Theories..* (Extended abstract) Parts I-II. **Bulletin of Section of Logic** 24,3 and 24,4 (1995), 158-168, 182-192. Németi, I. and Sain, I.

[1] *Decision problems for equational theories of relation algebras.* **Bulletin of Section of Logic** 23,2 (1994), 47-52. Andréka, H., Givant, S. and Németi, I.

9 Dissertations

[2] *Free algebras and decidability in algebraic logic.* (Szabadalgebrák és eldönthetőség az algebrai logikában.) (In Hungarian) **Doctoral Disser-**

tation with the Hungarian Academy of Sciences, Budapest, 1986. xviii+169pp. Németi, I.

[1] *Extending the universal algebraic notions of variety and related ones to partial algebras using abstract model theory and category theory.* (Az univerzális algebrai varietás- és kapcsolódó fogalmak kiterjesztése parciális algebrákra az absztrakt modellelmélet és kategóriaelmélet segítségével.) (In Hungarian) **Candidate's Dissertation with the Hungarian Academy of Sciences**, Budapest, 1976. 171pp. Németi, I.