

LIST OF PUBLICATIONS OF ISTVÁN NÉMETI

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

1 Books

- [4] *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.
- [3] *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.
- [2] *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

- [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

- [73] *Omitting types for finite variable fragments and complete representations of algebras.* **Journal of Symbolic Logic**, to appear. IF: 0.66.

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. Andr eka, H., Givant, S., N emeti, 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. Andr eka, H., Givant, S., Mikul as, Sz., N emeti, 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. Andr eka, H., Goldblatt, R. and N emeti, I.
- [58] *On the equational theory of representable polyadic equality algebras.* (Extended abstract) **Logic Journal of the IGPL** 6,3 (1998), 3-15. N emeti, I. and S agi, G.
- [57] *Relation algebras from cylindric and polyadic algebras.* **Logic Journal of the IGPL** 5,4 (1997), 575-588. N emeti, I. and Simon, A.
- [56] *Strong representability of fork algebras, a set theoretic foundation.* **Journal of the IGPL** 5,1 (1997), 3-28. N emeti, I.
- [55] *Axiomatization of identity-free equations valid in relation algebras.* **Algebra Universalis** 35 (1996), 256-264. IF: 0.166. Andr eka, H. and N emeti, I.
- [54] *Decidable and undecidable logics with a binary modality.* **Journal of Logic, Language and Information** 4 (1995), 191-206. Kurucz,  ., N emeti, I., Sain, I. and Simon, A.
- [53] *Taming Logic.* **Journal of Logic, Language, and Information** 4 (1995), 207-226. Marx, M., Mikul as, Sz. and N emeti, I.
- [52] *Back and forth between modal logic and classical logic.* **Journal of the IGPL** 3,5 (1995), 685-720. Andr eka, H., van Benthem, J. and N emeti, I.
- [51] *Expressibility of properties of relations.* **Journal of Symbolic Logic** 60,3 (1995), 970-991. IF: 0.311. Andr eka, H., Duentsch, I. and N emeti, I.
- [50] *Perfect extensions and derived algebras.* **Journal of Symbolic Logic** 60,3 (1995), 775-796. IF: 0.311. Andr eka, H., Givant, S. and N emeti, I.
- [49] *Binary relations and permutation groups.* **Mathematical Logic Quarterly** 41 (1995), 197-216. IF: 0.187. Andr eka, H., D untsch, I. and N emeti, 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. Némethi, 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. Andr eka, H., Kurucz,  . and N emethi, I.
- [46] *The lattice of varieties of representable relation algebras.* **Journal of Symbolic Logic** 59,2 (1994), 631-661. IF: 0.204. Andr eka, H., Givant, S. and N emethi, 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,  ., N emethi, I., Sain, I. and Simon, A.
- [44] *A nonpermutational integral relation algebra.* **Michigan Math. J.** 39 (1992), 371-384. IF: 0.253. Andr eka, H., D untsch, I. and N emethi, 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) N emethi, I.
- [42] *Splitting in relation algebras.* **Proceedings of Amer. Math. Soc.** 111,4 (1991), 1085-1093. IF: 0.276. Andr eka, H., Maddux, R. and N emethi, I.
- [41] *Free algebras in discriminator varieties.* **Algebra Universalis** 28 (1991), 401-447. IF: 0.129. Andr eka, H., J onsson, B. and N emethi, 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. Andr eka, H., N emethi, 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. Andr eka, H., N emethi, 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. Andr eka, H., Craig, W. and N emethi, I.
- [37] *On varieties of cylindric algebras with applications to logic.* **Annals of Pure and Applied Logic** 36 (1987), 235-277. N emethi, 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. Andr eka, H. and N emeti, I.
- [23] *Similarity types, pseudosimple algebras, and congruence representation of chains.* **Algebra Universalis** 13 (1981), 293–306. Andr eka, H. and N emeti, I.
- [22] *Does $SPK \supseteq PSK$ imply axiom of choice?* **Comm. Math. Univ. Carolinae.** 21,4 (1980), 699–706. Andr eka, H. and N emeti, I.
- [21] *On systems of varieties definable by schemes of equations.* **Algebra Universalis** 11 (1980), 105–116. Andr eka, H. and N emeti, I.
- [20] *Injectivity in categories to represent all first order formulas.* **Demonstratio Mathematica** 12 (1979), 717–732, Andr eka, H. and N emeti, I.
- [19] *Formulas and ultraproducts in categories.* **Beitr age zur Algebra und Geometrie** 8 (1979), 133–151. Andr eka, H. and N emeti, I.
- [18] *Neat reducts of varieties.* **Studia Sci. Math. Hungar.** 13 (1978), 47–51. Andr eka, H. and N emeti, I.
- [17] *From hereditary classes to varieties in abstract model theory and partial algebras.* **Beitr age zur Algebra und Geometrie** 7 (1978), 69–78. N emeti, I.
- [16] *Los lemma holds in every category.* **Studia Sci. Math. Hungar.** 13 (1978), 361–376. Andr eka, H. and N emeti, I.
- [15] *The generalised completeness of Horn predicate logic as a programming language.* **Acta Cybernetica** Tom 4, Fasc 1 (Szeged 1978), 3–10. Andr eka, H. and N emeti, I.
- [14] *On universal algebraic construction of logics.* **Studia Logica** 36,1–2 (1977), 9–47. Andr eka, H., Gergely, T. and N emeti, I.
- [13] *On the adequateness of predicate logic programming.* **AISB European Newsletter** Issue 23 (1976), 30–32. Andr eka, H. and N emeti, I.
- [12] *On a proof of Shelah.* **Bulletin de l’Academie Polonaise des Sciences (Series Math.)** 27 (1976), 1–7. Andr eka, H., Dahn, B. I. and N emeti, I.
- [11] *Remarks on free products in regular varieties and sink-complemented subalgebras.* **Studia Sci. Math. Hung.** 10 (1975), 23–31, Andr eka, H. and N emeti, 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) (Mnogoszortnűje jázüki i ih szvjáz sz jázükámi n-ovo porjádka.) **Kibernetika** 75,4 (Kijev 1975), 86–92. Andréka, H., Gergely, T. and Németi, I.
- [7] *On some questions of higher order logic.* (In Hungarian) (Az ennendű 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 porjádka. I–II.) **Kibernetika** 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] *Hierarchical 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

- [19] *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.

[18] *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 Zakharyashev, M., Springer Verlag, 2007. pp. 217-252. Madarász, J. X., Németi, I., and Székely, G.

[17] *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.

[16] *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.

[15] *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.

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

[13] *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.

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

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

[10] *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. Andr eka, H., van Benthem, J. and N emeti, I.

[9] *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. Andr eka, H., Goranko, V., Mikul as, Sz., N emeti, I. and Sain, I.

[8] *General algebraic logic: a perspective on "what is logic"*. In: **What is a logical system**, ed: D. M. Gabbay, Clarendon Press, Oxford, 1994. pp.393-444. Andr eka, H. and N emeti, I.

[7] *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. Andr eka, H., N emeti, I. and Sain, I.

5 Book Chapters

[6] *Investigations in Arrow Logic*. In: **Arrow Logic and Multi-Modal Logic**, M. Marx, L. P olos, and M. Masuch eds, CSLI Publications, Stanford, California, 1996. pp.35-61. Marx, M., Mikul as, Sz., N emeti, I. and Sain, I.

[5] *Causes and remedies for undecidability in arrow logics and in multi-modal logics*. **Arrow Logic and Multi-Modal Logic**, M. Marx, L. P olos, and M. Masuch eds, CSLI Publications, Stanford, California, 1996. pp.63-99. Andr eka, H., Kurucz,  .A., N emeti, I., Sain, I. and Simon, A.

[4] *Fine-structure analysis of first order logic*. **Arrow Logic and Multi-Modal Logic**, M. Marx, L. P olos, and M. Masuch eds, CSLI Publications, Stanford, California, 1996. pp.221-247. N emeti, 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. Andr eka, H. and N emeti, 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 N emeti, I.

[1] *Logical foundations for the formalization and application of general system theory*. (In Hungarian) (Az  altalános rendszerelm elet formalizálásának

és alkalmazásának logikai alapjai.) In: **System Theory Research** (Rendszertudomány). Publisher for Economics and Law (Közgazdasági és Jogi Könyvkiadó), Budapest 1973. pp.307–357. Gergely, T. and Némethi, 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. Némethi, I. and Andr eka, 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. Mikul as, Sz., Némethi, I. and Sain, I.

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

[20] *On J onsson's clones of operations on binary relations*. In: **Algebraic Logic** (Coll. Math. Soc. J. Bolyai Vol. 54), North-Holland, 1991. pp.431–442. Andr eka, H. and Némethi, 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. Andr eka, H., J onsson, B. and N emeti, 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. Andr eka, H., N emeti, 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. Andr eka, H., Comer, S. D. and N emeti, 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  ber 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. Andr eka, H. and N emeti, 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. N emeti, I.
- [13] *Dynamic algebras of programs.* In: **Fundamentals of Computation Theory’81** (Proc. Conf. Szeged 1981) Ed.: G ecseg, F. Lecture Notes in Computer Science Vol 117, Springer-Verlag, Berlin, 1981. pp.281–290. N emeti, I.
- [12] *Some universal algebraic and model theoretic results in computer science.* In: **Fundamentals of Computation Theory’81** (Proc. Conf. Szeged 1981) Ed.: G ecseg, F. Lecture Notes in Computer Science Vol 117, Springer-Verlag, Berlin, 1981, pp.16–23. Andr eka, H. and N emeti, 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

- [4] *A logical investigation of inertial and accelerated observers in flat space-time.* 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 Dissertation 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.

Altogether 133 publications