References

- [1] Théorie de Topos et Cohomologie Etale des Schémas. Tome 2, Séminaire de Géométrie Algébrique du Bois-Marie 1963–1964 (SGA 4), volume 270 of Lecture Notes in Mathematics. Springer-Verlag, Berlin, 1972. Dirigé par M. Artin, A. Grothendieck, et J. L. Verdier. Avec la collaboration de N. Bourbaki, P. Deligne et B. Saint-Donat.
- [2] Théorie de Topos et Cohomologie Etale des Schémas. Tome 3, Séminaire de Géométrie Algébrique du Bois-Marie 1963–1964 (SGA 4), volume 305 of Lecture Notes in Mathematics. Springer-Verlag, Berlin, 1973. Dirigé par M. Artin, A. Grothendieck, et J. L. Verdier. Avec la collaboration de N. Bourbaki, P. Deligne et B. Saint-Donat.
- [3] 2018 IEEE 48th International Symposium on Multiple-Valued Logic—ISMVL 2018. IEEE Computer Society, Los Alamitos, CA, 2018. 16–18 May 2018, Linz, Austria.
- [4] Mathematical Components. Libraries of Formalized Mathematics, 2018.
- [5] Homotopy Type Theory and Univalent Foundations, 2018/2019. Centre for Advanced Study at the Norwegian Academy of Science and Letters.
- [6] An Adequacy Theorem for Dependent Type Theory. Theory Comput. Syst., 63(4):647–665, 2019.
- [7] Our modern society depends on correct mathematics, 2019.
- [8] Socio-economic impact of mathematical research and mathematical technology in Spain. Technical report, Red Estratégica en Matemáticas (REM), 2019.
- [9] Samson Abramsky and Steven Vickers. Quantales, observational logic and process semantics. *Math. Structures Comput. Sci.*, 3(2):161–227, 1993.
- [10] Vito Michele Abrusci and Lorenzo Tortora de Falco. Logica. Volume 2 Incompletezza, teoria assiomatica degli insiemi, volume 111 of La Matematica per il 3+2. Springer-Verlag Mailand, 2018.
- [11] Theodora Achourioti and Michiel van Lambalgen. Kant's logic revisited. If CoLog Journal of Logics and their Applications, 4(4):845–865. Special Issue Dedicated to the Memory of Grigori Mints.
- [12] Peter Aczel. An introduction to inductive definitions. In Jon Barwise, editor, *Handbook of Mathematical Logic*, volume 90 of *Studies in Logic and the Foundations of Mathematics*, pages 739–782. Elsevier Science B.V., Amsterdam, 1977.
- [13] Peter Aczel. The type theoretic interpretation of constructive set theory. In Logic Colloquium '77 (Proc. Conf., Wrocław, 1977), volume 96 of Stud. Logic Foundations Math., pages 55–66. North-Holland, Amsterdam, 1978.
- [14] Peter Aczel. The type theoretic interpretation of constructive set theory: choice principles. In *The L. E. J. Brouwer Centenary Symposium (Noordwijkerhout, 1981)*, volume 110 of *Stud. Logic Found. Math.*, pages 1–40. North-Holland, Amsterdam, 1982.
- [15] Peter Aczel. The type theoretic interpretation of constructive set theory: inductive definitions. In *Logic, methodology* and philosophy of science, VII (Salzburg, 1983), volume 114 of Stud. Logic Found. Math., pages 17–49. North-Holland, Amsterdam, 1986.
- [16] Peter Aczel. On relating type theories and set theories. In T. Altenkirch, B. Reus, and W. Naraschewski, editors, *Types for Proofs and Programs*, pages 33–46. Springer, 1998.
- [17] Peter Aczel. Zorn's Lemma in CZF. Unpublished note, 2002.
- [18] Peter Aczel. Aspects of general topology in constructive set theory. Ann. Pure Appl. Logic, 137(1-3):3-29, 2006.
- [19] Peter Aczel, Hajime Ishihara, Takako Nemoto, and Yasushi Sangu. Generalized geometric theories and set-generated classes. *Math. Structures Comput. Sci.*, 25(7):1466–1483, 2015.
- [20] Peter Aczel, Seppo Miettinen, and Jouko Vaananen. The strength of Martin-Löf's intuitionistic type theory with one universe. In S. Miettinen and S. Väänänen, editors, Proceedings of Symposia in Mathematical Logic, Oulu, 1974, and Helsinki, 1975, Report No. 2 (University of Helsinki, Department of Philosophy, 1977, pages 1–32, 1984.
- [21] Peter Aczel and Michael Rathjen. Notes on constructive set theory. Technical report, Institut Mittag-Leffler, 2000. Report No. 40.
- [22] Peter Aczel and Michael Rathjen. Constructive set theory. Book draft, 2010.
- [23] Peter Aczel and Michael Rathjen. Constructive set theory. book draft, 2010. Available at http://www1.maths.leeds.ac.uk/~rathjen/book.pdf.
- [24] Peter Aczel, Benno van den Berg, Johan Granström, and Peter Schuster. Are there enough injective sets? *Studia Logica*, 2012.

- [25] Jiří Adámek and Jiří Rosický. Locally Presentable and Accessible Categories. Number 189 in London Math Soc. Lecture Note Ser. Cambridge University Press, Cambridge, 1994.
- [26] William W. Adams and Philippe Loustaunau. An Introduction to Gröbner Bases, volume 3 of Grad. Stud. Math. American Mathematical Society, Providence, RI, 1994.
- [27] Alan Adamson and Robin Giles. A game-based formal system for L_{ω} . Studia Logica, 38(1):49–73, 1979.
- [28] Bahareh Afshari, Sebastian Enqvist, and Graham E. Leigh. Cyclic proofs in the first-order mu-calculus. Submitted.
- [29] Bahareh Afshari, Gerhard Jäger, and Graham E. Leigh. An infinitary treatment of full mu-calculus. In Rosalie Iemhoff, Michael Moortgat, and Ruy J. G. B. de Queiroz, editors, Logic, Language, Information, and Computation 26th International Workshop, Wollic 2019, Utrecht, The Netherlands, July 2-5, 2019, Proceedings, volume 11541 of Lecture Notes in Computer Science, pages 17–34. Springer, 2019.
- [30] Bahareh Afshari and Graham E. Leigh. Normal forms for cyclic proofs. Forthcoming.
- [31] Bahareh Afshari and Graham E. Leigh. Circular proofs for the modal mu-calculus. *Proceedings of Applied Mathematics* and Mechanics, 16:893–894, 2016.
- [32] Bahareh Afshari and Graham E. Leigh. Cut-free completeness for modal mu-calculus. In 32nd Annual ACM/IEEE Symposium on Logic in Computer Science, LICS 2017, Reykjavik, Iceland, June 20-23, 2017, pages 1–12. IEEE Computer Society, 2017.
- [33] Bahareh Afshari and Graham E. Leigh. Lyndon interpolation for the modal mu-calculus. In *Proceedings of the Thirteenth International Tbilisi Symposium on Language, Logic and Computation*, 2021.
- [34] Bahareh Afshari, Graham E. Leigh, and Guillermo Menéndez Turata. Uniform interpolation from cyclic proofs: The case of modal mu-calculus. In Anupam Das and Sara Negri, editors, Automated Reasoning with Analytic Tableaux and Related Methods 30th International Conference, TABLEAUX 2021, Birmingham, UK, September 6-9, 2021, Proceedings, volume 12842 of Lecture Notes in Computer Science, pages 335–353. Springer, 2021.
- [35] Juan Aguilera, Anton Freund, Michael Rathjen, and Andreas Weiermann. Ackermann and Goodstein go functorial. Pacific Journal of Mathematics, 313:251–291, 2021.
- [36] Juan Aguilera, Anton Freund, Michael Rathjen, and Andreas Weiermann. Boundedness theorems for flowers and sharps. *Proceedings of the American Mathematical Society*, To appear.
- [37] Tomoharu Akiba. On the normality of R(X). J. Math. Kyoto Univ., 20(4):749-752, 1980.
- [38] Tomoharu Akiba and Masayoshi Nagata. On normality of a Noetherian ring. J. Math. Kyoto Univ., 17(3):605–609, 1977.
- [39] Bernard Alfonsi. Some remarks on the ring r(x). Comment. Math. Univ. St. Paul, 26:137–140, 1977.
- [40] Noga Alon. Combinatorial Nullstellensatz. Combin. Probab. Comput., 8(1-2):7-29, 1999.
- [41] Mari-Emi Alonso and Henri Lombardi. Generalized Taylor formulae, computations in real closed valued fields and quantifier elimination. In S. Kuhlmann F.-V. Kuhlmann and M. Marshall, editors, *Valuation Theory and its Applications*. Vol 1, volume 32 of Fields Institute Communications, pages 33–57, 2002.
- [42] Mari-Emi Alonso, Henri Lombardi, and Hervé Perdry. Elementary constructive theory of Henselian local rings., 2006.
- [43] Maria Emilia Alonso, Thierry Coquand, and Henri Lombardi. Revisiting Zariski Main Theorem from a constructive point of view. J. Algebra, 406:46–68, 2014.
- [44] Roberto M. Amadio and Pierre-Louis Curien. Domains and Lambda Calculi. Cambridge University Press, 1998.
- [45] Frank W. Anderson and Kent R. Fuller. Rings and Categories of Modules, volume 13 of Graduate Texts in Mathematics. Springer-Verlag, New York, second edition, 1992.
- [46] Haijnal Andréka and Istvan Németi. Injectivity in categories to represent all first order formulas, i. *Demonstratio Math.*, XII(3), 1979.
- [47] Wedad Antonius. Théories cohérentes et prétopos. Thèse de Maitrise ès Sciences Mathématiques, Université de Montréal, 1975.
- [48] Kwame Anthony Appiah. As If. Idealization and Ideals. Harvard University Press, Cambridge, MA, 2017.
- [49] Miroslav Arapović. On the embedding of a commutative ring into a 0-dimensional commutative ring. Glas. Mat. Ser. III, 18(1):53–59, 1983.
- [50] Sergei Artemov and Tudor Protopopescu. Intuitionistic epistemic logic. Rev. Symb. Logic, 9:266–298, 2016.

- [51] Emil Artin. Über die Zerlegung definiter Funktionen in Quadrate. Abh. Math. Sem. Univ. Hamburg, 5(1):100–115, 1927.
- [52] Emil Artin and Otto Schreier. Algebraische Konstruktion reeller Körper. Abh. Math. Sem. Univ. Hamburg, 5(1):85–99, 1927.
- [53] Michael Artin, Alexander Grothendieck, and Jean-Louis Verdier. Théorie de Topos et Cohomologie Etale des Schémas. Tome 1: Théorie des topos, Séminaire de Géométrie Algébrique du Bois-Marie 1963–1964 (SGA 4), volume 269 of Lecture Notes in Mathematics. Springer-Verlag, Berlin, 1972. Avec la collaboration de N. Bourbaki, P. Deligne et B. Saint-Donat.
- [54] Federico Aschieri, Agata Ciabattoni, and Francesco A. Genco. Gödel logic: from natural deduction to parallel computation. In *Proceedings of the Thirty-Second Annual ACM/IEEE Symposium on Logic in Computer Science (LICS)*, Reykjavik 2017. To appear.
- [55] Michael F. Atiyah and Ian G. Macdonald. *Introduction to Commutative Algebra*. Addison-Wesley, Reading, MA, 1969.
- [56] Jeremy Avigad. The metamathematics of ergodic theory. Ann. Pure Appl. Logic, 157(2-3):64-76, 2009.
- [57] Jeremy Avigad, Edward Dean, and John Mumma. A formal system for Euclids Elements. Rev. Symb. Log., 2(4):700–768, 2009.
- [58] Arnon Avron. Simple consequence relations. Inform. and Comput., 92:105–139, 1991.
- [59] Arnon Avron. Gentzen-type systems, resolution and tableaux. J. Auto. Reasoning, 10(2):265–281, 1993.
- [60] Steve Awodey. Mathesis Universalis and Homotopy Type Theory. In S. Centrone, S. Negri, D. Sarikaya, and P. Schuster, editors, Mathesis Universalis, Computability and Proof, volume 412 of Synthese Library, pages 13–36. Springer, Cham, 2019.
- [61] Steven Awodey. Type theory and homotopy. In *Epistemology versus Ontology*, volume 27 of *Log. Epistemol. Unity Sci.*, pages 183–201. Springer, 2012.
- [62] Matthias Baaz. Note on the Benefit of Proof Representations by Name. In S. Centrone, S. Negri, D. Sarikaya, and P. Schuster, editors, Mathesis Universalis, Computability and Proof, volume 412 of Synthese Library, pages 37–45. Springer, Cham, 2019.
- [63] Matthias Baaz, Agata Ciabattoni, Christian Fermüller, and Helmut Veith. Proof theory of fuzzy logics: Urquhart's C and related logics. In *Mathematical foundations of computer science*, 1998 (Brno), volume 1450 of Lecture Notes in Comput. Sci., pages 203–212. Springer, Berlin, 1998.
- [64] Matthias Baaz, Agata Ciabattoni, and Franco Montagna. Analytic calculi for monoidal t-norm based logic. Fundamenta Informaticae, 59(4):315–332, 2004.
- [65] David Baelde, Amina Doumane, and Alexis Saurin. Infinitary proof theory: the multiplicative additive case. In Jean-Marc Talbot and Laurent Regnier, editors, 25th EACSL Annual Conference on Computer Science Logic, CSL 2016, August 29 - September 1, 2016, Marseille, France, volume 62 of LIPIcs, pages 42:1–42:17. Schloss Dagstuhl -Leibniz-Zentrum für Informatik, 2016.
- [66] Reinhold Baer. Abelian groups that are direct summands of every containing abelian group. *Bull. Amer. Math. Soc.*, 46:800–806, 1940.
- [67] Raymond Balbes. Projective and injective distributive lattices. Pacific J. Math., 21(3):405–420, 1967.
- [68] Raymond Balbes and Philip Dwinger. Distributive Lattices. University of Missouri Press, Columbia, MO, 1974.
- [69] Alexandru Baltag, Jort Bergfeld, Kohei Kishida, Joshua Sack, Sonja Smets, and Shengyang Zhong. Quantum probabilistic dyadic second-order logic. 08 2013.
- [70] Alexandru Baltag and Sonja Smets. Quantum logic as a dynamic logic. Synthese, 179(2):285–306, 2011.
- [71] Bernhard Banaschewski. The power of the ultrafilter theorem. J. London Math. Soc., 27(2):193–202, 1983.
- [72] Bernhard Banaschewski. A new proof that "Krull implies Zorn". Math. Log. Quart., 40:478–480, 1994.
- [73] Bernhard Banaschewski. Radical ideals and coherent frames. Comment. Math. Univ. Carolin., 37(2):349–370, 1996.
- [74] Bernhard Banaschewski and Günter Bruns. Injective hulls in the category of distributive lattices. *J. Reine Angew. Mathematik*, 232:102–109, 1968.
- [75] Bernhard Banaschewski and Marcel Erné. On Krull's separation lemma. Order, 10:253–260, 1993.
- [76] Bernhard Banaschewski and Roswitha Harting. Lattice aspects of radical ideals and choice principles. *Proc. London Math. Soc.* (3), 50:385–404, 1985.

- [77] Bernhard Banaschewski and Peter Schuster. The shrinking principle and the axiom of choice. *Monatshefte Math.*, 151:263–270, 2007.
- [78] Bernhard Banaschewski and Jacob J. C. Vermeulen. Polynomials and radical ideals. J. Pure Appl. Algebra, 113(3):219–227, 1996.
- [79] Sami Barhoumi. Seminormality and polynomial rings. J. Algebra, 322:1974–1978, 2009.
- [80] Sami Barhoumi and Henri Lombardi. An algorithm for the Traverso–Swan theorem on seminormal rings. *J. Algebra*, 320:1531–1542, 2008.
- [81] Sami Barhoumi, Henri Lombardi, and Ihsen Yengui. Projective modules over polynomial rings: a constructive approach. *Math. Nachr.*, 282, 2009.
- [82] Michael Barr. Toposes without points. J. Pure Appl. Algebra, 5(3):265–280, 1974.
- [83] Bruno Barras. Sets in Coq, Coq in Sets. J. Form. Reason., 3(1):29-48, 2010.
- [84] Neil Barton and Kameryn J. Williams. Varieties of class-theoretic potentialism. arXiv e-prints, page arXiv:2108.01543, August 2021.
- [85] Jon Barwise. Admissible sets and structures. Springer-Verlag, Berlin, 1975.
- [86] Saugata Basu, Richard Pollack, and Marie-Françoise Roy. Algorithms in Real Algebraic Geometry. Springer, Berlin, 2003.
- [87] Giulia Battilotti and Giovanni Sambin. Pretopologies and a uniform presentation of sup-lattices, quantales and frames. *Ann. Pure Appl. Logic*, 137(1–3):30–61, 2006.
- [88] Andrej Bauer and Peter Lefanu Lumsdaine. On the Bourbaki-Witt principle in toposes. *Math. Proc. Cambridge Philos. Soc.*, 155:87–99, 2013.
- [89] Silvana Bazzoni and Sarah Glaz. Gaussian properties of total rings of quotients. J. Algebra, 310(1):180–193, 2007.
- [90] Karim Johannes Becher. Splitting fields of central simple algebras of exponent two. J. Pure Appl. Algebra, 220:3450–3453, 2016.
- [91] Michael Beeson. Recursive models for constructive set theories. Ann. Math. Log., 23(2-3):127–178, 1982.
- [92] Michael Beeson. Foundations of Constructive Mathematics. Springer-Verlag, Berlin, 1985.
- [93] J. L. Bell. Zorn's lemma and complete Boolean algebras in intuitionistic type theories. J. Symb. Log., 62(4):1265–1279, 1997.
- [94] John L. Bell. *Toposes and Local Set Theories: An Introduction*. Number 14 in Oxford Logic Guides. Oxford University Press, Oxford, 1988.
- [95] John L. Bell. Zorn's lemma and complete Boolean algebras in intuitionistic type theories. J. Symb. Log., 62(4):1265–1279, 1997.
- [96] John L. Bell. Boolean algebras and distributive lattices treated constructively. *Math. Log. Quarterly*, 45(1):135–143, 1999.
- [97] John L. Bell. Some new intuitionistic equivalents of Zorn's lemma. Arch. Math. Logic, 42(8):811–814, 2003.
- [98] John L. Bell. Set Theory. Boolean-Valued Models and Independence Proofs. Oxford Logic Guides. Oxford University Press, Oxford, third edition, 2005.
- [99] John L. Bell. The axiom of choice and the law of excluded middle in weak set theories. *MLQ Math. Log. Q.*, 54:194–201, 2008.
- [100] John L. Bell. Intuitionistic Set Theory. Number 50 in Studies in Logic. College Publications, 2014.
- [101] Gianluigi Bellin. Categorical proof theory of co-intuitionistic linear logic. Logical Methods in Computer Science, 10(3), Sep 2014.
- [102] Daniel Bembé. An algebraic certificate for Budan's theorem. Journal of Pure and Applied Algebra, 215(6):1360-1370, 2011
- [103] Daniel Bembé. Algebraic certificates for Budan's theorem. Doctoral dissertation, Université de Franche-Comté and Universität München, 2011.
- [104] Daniel Bembé and André Galligo. Virtual roots of a real polynomial and fractional derivatives. In *Proceedings of the* 36th international symposium on symbolic and algebraic computation, ISSAC 2011, San Jose, CA, USA, June 7–11, 2011, pages 27–34. New York, NY: Association for Computing Machinery (ACM), 2011.

- [105] Itaï Ben Yaacov and Bruno Poizat. Fondements de la logique positive. The Journal of Symbolic Logic, 72(4):1141–1162, 2007.
- [106] Itaï Ben Yaacov and Bruno Poizat. Fondements de la logique positive. J. Symb. Log., 72(4):1141–1162, 2007.
- [107] Itay Ben-Yaacov. Positive model theory and compact abstract theories. J. Math. Log., 3(1):85–118, 2003.
- [108] Itay Ben-Yaacov. Positive model theory and compact abstract theories. *Journal of Mathematical Logic*, 3(01):85–118, 2003.
- [109] Paul Benacerraf and Hilary Putnam. Philosophy of Mathematics. Cambridge University Press, 2nd edition, 1983.
- [110] Stefano Berardi, Marc Bezem, and Thierry Coquand. On the computational content of the axiom of choice. *Journal of Symbolic Logic*, 63(2):600–622, 1998.
- [111] Stefano Berardi and Silvia Steila. An intuitionistic version of Ramsey's theorem and its use in program termination. *Ann. Pure Appl. Logic*, 166:1382–1406, 2015.
- [112] Stefano Berardi and Makoto Tatsuta. Intuitionistic Podelski-Rybalchenko theorem and equivalence between inductive definitions and cyclic proofs. In Corina Cîrstea, editor, Coalgebraic Methods in Computer Science 14th IFIP WG 1.3 International Workshop, CMCS 2018, Colocated with ETAPS 2018, Thessaloniki, Greece, April 14-15, 2018, Revised Selected Papers, volume 11202 of Lecture Notes in Computer Science, pages 13-33. Springer, 2018.
- [113] Stefano Berardi and Makoto Tatsuta. Classical system of Martin–Löf's inductive definitions is not equivalent to cyclic proofs. Log. Methods Comput. Sci., 15(3), 2019.
- [114] Josef Berger, Hajime Ishihara, and Peter Schuster. The weak König lemma, Brouwer's fan theorem, De Morgan's law, and dependent choice, 2009.
- [115] Josef Berger, Hajime Ishihara, and Peter Schuster. The weak König lemma, Brouwer's fan theorem, De Morgan's law, and dependent choice. *Rep. Math. Logic*, 47:63–86, 2012.
- [116] U. Berger. A domain model characterising strong normalisation. Annals of Pure and Applied Logic, 156:39–50, 2008.
- [117] Ulrich Berger. A computational interpretation of open induction. In F. Titsworth, editor, *Proceedings of the Ninetenth Annual IEEE Symposium on Logic in Computer Science*, pages 326–334. IEEE Computer Society, 2004.
- [118] Ulrich Berger. Constructivism in abstract mathematics. In S. Centrone, S. Negri, D. Sarikaya, and P. Schuster, editors, *Mathesis Universalis, Computability and Proof*, Synthese Library. Springer, forthcoming.
- [119] Ulrich Berger and Peter Schuster. Zorn induction, 2007.
- [120] Ulrich Berger and Monika Seisenberger. Proofs, programs, processes. Theory Comput. Syst., 51:313–329, 2012.
- [121] José Bertin. Anneaux cohérents réguliers. C. R. Acad. Sci. Paris Sér. A-B, 273:A590-A591, 1971.
- [122] Francesco Berto. Tutti pazzi per Gödel! La guida completa al Teorema di Incompletezza. Editori Laterza, 2008.
- [123] Marc Bezem. Final report: automating coherent logic—acl, 2013.
- [124] Marc Bezem, Ulrik Buchholtz, and Thierry Coquand. Syntactic forcing models for coherent logic. Indag. Math. (N.S.), 29(6):1441–1464, 2018.
- [125] Marc Bezem and Thierry Coquand. Automating coherent logic. In *International Conference on Logic for Programming Artificial Intelligence and Reasoning*, pages 246–260. Springer, 2005.
- [126] Marc Bezem and Thierry Coquand. Automating coherent logic. In Logic for programming, artificial intelligence, and reasoning. 12th international conference, LPAR 2005, Montego Bay, Jamaica, December 2–6, 2005. Proceedings, pages 246–260. Berlin: Springer, 2005.
- [127] Marc Bezem and Thierry Coquand. A Kripke model for simplicial sets. Theor. Comput. Sci., 574:86–91, 2015.
- [128] Marc Bezem and Thierry Coquand. Skolem's theorem in coherent logic. Fundamenta Informaticae, 170(1-3):1–14, 2019.
- [129] Marc Bezem, Thierry Coquand, and Simon Huber. A model of type theory in cubical sets. In R. Matthes and A. Schubert, editors, 19th International Conference on types for Proofs and Programs (TYPES 2013), pages 107–128, 2013.
- [130] Marc Bezem, Thierry Coquand, and Simon Huber. The Univalence Axiom in Cubical Sets. *J. Automat. Reason.*, 63(2):159–171, 2019.
- [131] Marc Bezem, Thierry Coquand, and Arild Waaler. Research proposal: automating coherent logic, 2006.

- [132] Marc Bezem and Dimitri Hendriks. On the mechanization of the proof of Hessenberg's theorem in coherent logic. J. Automat. Reason., 40(1):61–85, 2008.
- [133] Jean-Yves Béziau. Les axiomes de Tarski. In Roger Pouivet and Manuel Resbuschi, editors, *La philosophie en Pologne* 1919-1939. Librairie Philosophique J. VRIN, Paris, 2006.
- [134] Marta Bílková and Almudena Colacito. Proof theory for positive logic with weak negation, 2019.
- [135] Garrett Birkhoff. On the combination of subalgebras. Mathematical Proceedings of the Cambridge Philosophical Society, 29(4):441–464, 1933.
- [136] Garrett Birkhoff. Lattice Theory. American Mathematical Society Colloquium Publications, vol. 25, revised edition. American Mathematical Society, New York, 1948.
- [137] Garrett Birkhoff and John von Neumann. The logic of quantum mechanics. Annals of Mathematics, 37(4):823–843, 1936.
- [138] Errett Bishop. Foundations of Constructive Analysis. McGraw-Hill, New York, 1967.
- [139] Errett Bishop and Douglas Bridges. Constructive Analysis. Springer, 1985.
- [140] Patrick Blackburn, Maarten Rijke, and Yde Venema. Modal Logic. Cambridge Tracts in Theoretical Computer Science. Cambridge University Press, 2001.
- [141] RASMUS BLANCK and ALI ENAYAT. Marginalia on a theorem of woodin. The Journal of Symbolic Logic, 82(1):359–374, 2017.
- [142] Andreas Blass. Injectivity, projectivity, and the axiom of choice. Trans. Amer. Math. Soc., 255:31–59, 1979.
- [143] Andreas Blass. Existence of bases implies the axiom of choice. Contemp. Math., 31:31–33, 1984.
- [144] Andreas Blass. Prime ideals yield almost maximal ideals. Fund. Math., 127(1):57-66, 1987.
- [145] Andreas Blass. Topoi and computation. In Current Trends In Theoretical Computer Science: Essays and Tutorials, pages 310–317. World Scientific, Singapore, 1993.
- [146] Andreas Blass. Voting rules for infinite sets and Boolean algebras. In Su Gao, Steve Jackson, and Yi Zhang, editors, Advances in Logic, The North Texas Logic Conference, October 8–10, 2004, University of North Texas, Denton, Contemporary Mathematics. American Mathematical Society, 2007.
- [147] Andreas Blass. Does quantifier-elimination imply decidability?, 2012.
- [148] Ingo Blechschmidt. Using the internal language of toposes in algebraic geometry. Doctoral dissertation, Universität Augsburg, 2017.
- [149] Ingo Blechschmidt. Generalized spaces for constructive algebra. In Klaus Mainzer, Peter Schuster, and Helmut Schwichtenberg, editors, *Proof and Computation II. From Proof Theory and Univalent Mathematics to Program Extraction and Verification*. World Scientific, Singapore, 2021. Forthcoming.
- [150] Willem J. Blok and Bjarni Jónsson. Equivalence of consequence operations. Studia Logica, 83:91–110, 2006.
- [151] Jacek Bochnak, Michel Coste, and Marie-Françoise Roy. Real Algebraic Geometry. Springer-Verlag, Berlin, 1998.
- [152] T. Böhme, F. Göring, and J. Harant. Menger's theorem. J. Graph Theory, 37(1):3536, 2001.
- [153] André Boileau and André Joyal. La logique des topos. J. Symbolic Logic, 46(1):6-16, 1981.
- [154] Roberta Bonacina and Daniel Wessel. A formal approach to Menger's theorem. Submitted, 2020.
- [155] Roberta Bonacina and Daniel Wessel. Ribenboim's order extension theorem from a constructive point of view. *Algebra Universalis*, 81(5), 2020.
- [156] Roberta Bonacina and Daniel Wessel. A formal approach to menger's theorem. Rep. Math. Logic, 2022. Forthcoming.
- [157] J. A. Bondy and U. S. R. Murty. *Graph Theory*, volume 244 of *Graduate Texts in Mathematics*. Springer-Verlag, London, 2008.
- [158] J.A. Bondy and U.S.R. Murty. Graph Theory, volume 244 of Graduate Texts in Mathematics. Springer-Verlag, London, 2008.
- [159] George Boolos. The unprovability of consistency. An essay in modal logic. Cambridge University Press, Cambridge etc., 1979.
- [160] George Boolos. The Logic of Provability. Cambridge University Press, 1993.

- [161] George Boolos and Giovanni Sambin. An incomplete system of modal logic. *Journal of Philosophical Logic*, 14(4):351–358, 1985.
- [162] George Boolos and Giovanni Sambin. Provability: the emergence of a mathematical modality. Studia Logica, 50(1):1–23, 1991.
- [163] George S. Boolos, John P. Burgess, and Richard C. Jeffrey. *Computability and Logic*. Cambridge University Press, Cambridge, fifth edition, 2010.
- [164] Walter Bossert. Intersection quasi-orderings: An alternative proof. 16:221–225, 1999.
- [165] Walter Bossert, Yves Sprumont, and Kotaro Suzumura. Consistent rationalizability. Economica, 72:185–200, 2005.
- [166] Walter Bossert and Kotaro Suzumura. Consistency, Choice, and Rationality. Harvard University Press, Cambridge, 2010.
- [167] Walter Bossert and Kotaro Suzumura. Quasi-transitive and Suzumura consistent relations. Social Choice and Welfare, 39(2):323–334, 2012.
- [168] Nicolas Bourbaki. Sur le théorème de Zorn. Arch. Math. (Basel), 2:434-437 (1951), 1949-1950.
- [169] Nicolas Bourbaki. Elements of Mathematics: General Topology. Part 1. Addison-Wesley, Reading, Massachusetts, 1966.
- [170] Pierre Boutry. On the formalization of foundations of geometry. PhD thesis, 2018.
- [171] Jim Brewer and Fred Richman. Subrings of zero-dimensional rings. In James W. Brewer, Sarah Glaz, William J. Heinzer, and Bruce M. Olberding, editors, *Multiplicative Ideal Theory in Commutative Algebra: A Tribute to the Work of Robert Gilmer*, pages 73–88. Springer Science+Business Media, New York.
- [172] Douglas Bridges, Robin Havea, and Peter Schuster. Finitely generated Banach algebras and local Nullstellensätze. Publ. Math. Debrecen, 69(1–2):171–184, 2006.
- [173] Douglas Bridges, Ray Mines, Fred Richman, and Peter Schuster. The polydisk Nullstellensatz. Proc. Amer. Math. Soc., 132(7):2133–2140, 2004.
- [174] Douglas S. Bridges. Prime and maximal ideals in constructive ring theory. Commun. Algebra, 29:2787–2803, 2001.
- [175] Douglas S. Bridges and B. Mehta Ghanshyam. Representations of Preferences Orderings. Springer, Berlin, 1995.
- [176] James Brotherston. Cyclic proofs for first-order logic with inductive definitions. In Bernhard Beckert, editor, Automated Reasoning with Analytic Tableaux and Related Methods, International Conference, TABLEAUX 2005, Koblenz, Germany, September 14-17, 2005, Proceedings, volume 3702 of Lecture Notes in Computer Science, pages 78–92. Springer, 2005.
- [177] L.E.J. Brouwer. De onbetrouwbaarheid der logische principes. Tijdschrift voor Wijsbegeerte, 2:152–158, 1908.
- [178] L.E.J. Brouwer. Intuitionistische Zerlegung mathematischer Grundbegriffe. Jahresbericht der Deutschen Mathematiker-Vereinigung, 33:251–256, 1925.
- [179] Henning Bruhn, Reinhard Diestel, Matthias Kriesell, Rudi Pendavingh, and Paul Wollan. Axioms for infinite matroids. *Adv. Math.*, 239:18–46, 2013.
- [180] G. Brunerie. On the homotopy groups of spheres in homotopy type theory. PhD thesis, University of Nice Sophia Antipolis, 2016.
- [181] Riccardo Bruni. Kurt Gödel, un profilo. Carocci editore, 2015.
- [182] Rainer Brüske, Friedrich Ischebeck, and Ferdinand Vogel. Kommutative Algebra. Bibliographisches Institut, Mannheim, 1989.
- [183] A. Bucalo and G. Rosolini. Completions, comonoids, and topological spaces. Ann. Pure Appl. Logic, 137:104–125, 2006.
- [184] Wilfried Buchholz, Ulrich Berger, and Helmut Schwichtenberg. Refined program extraction from classical proofs. *Ann. Pure Appl. Logic*, 114:3–25, 2002.
- [185] Budan de Boislaurent. Novelle méthode pour la résolution des équations numériques d'un degré quelconque. Herausgegeben von der Académie des Sciences, enthält im Anhang einen Beweis der Regel von Budan, Paris, 1821.
- [186] Paul J. Campbell. The origin of "Zorn's lemma". Historia Math., 5:77-89, 1978.
- [187] Olivia Caramello. Theories, Sites, Toposes: Relating and studying mathematical theories through topos-theoretic 'bridges'. Oxford University Press, Oxford, 2018.

- [188] Olivia Caramello. Theories, sites, toposes. Relating and studying mathematical theories through topos-theoretic 'bridges'. Oxford: Oxford University Press, 2018.
- [189] Robert Carmichael. The Theory of Numbers. Project Gutenberg, 2004.
- [190] Rudolf Carnap. Formalization of Logic. Harvard University Press, Cambridge, MA, 1943.
- [191] Emily D. Bello-Pardo Stan Oklobdzija Martijn Schoonvelde Jeffrey W. Lockhart Carsten Schwemmer, Carly Knight. Diagnosing gender bias in image recognition systems. *Socius: Sociological Research for a Dynamic World*, 6:1–17, 2020.
- [192] Claudio Castellini and Alan Smaill. A systematic presentation of quantified modal logics. L.J. of the IGPL, 10(6):571–599, 2002.
- [193] Susumu Cato. Szpilrajn, Arrow and Suzumura: Concise proofs of extension theorems and an extension. *Metroeconomica*, 63:235–249, 2012.
- [194] Susumu Cato. Szpilrajn, Arrow and Suzumura: concise proofs of extension theorems and an extension. *Metroeco-nomica*, 63(2):235–249, 2012.
- [195] Jan Cederquist and Thierry Coquand. Entailment relations and distributive lattices. In Samuel R. Buss, Petr Hájek, and Pavel Pudlák, editors, Logic Colloquium '98. Proceedings of the Annual European Summer Meeting of the Association for Symbolic Logic, Prague, Czech Republic, August 9–15, 1998, volume 13 of Lect. Notes Logic, pages 127–139. A. K. Peters, Natick, MA, 2000.
- [196] Jan Cederquist, Thierry Coquand, and Sara Negri. The Hahn-Banach theorem in type theory. In G. Sambin and J.M. Smith, editors, Twenty-Five Years of Constructive Type Theory (Venice, 1995), volume 36 of Oxford Logic Guides, pages 57-72. Oxford University Press, New York, 1998.
- [197] Jan Cederquist, Thierry Coquand, and Sara Negri. The Hahn–Banach Theorem in Type Theory. In Giovanni Sambin and Jan M. Smith, editors, Twenty-Five Years of Constructive Type Theory. Oxford University Press, 1998.
- [198] Jan Cederquist and Sara Negri. A constructive proof of the Heine–Borel covering theorem for formal reals. In S. Berardi and M. Coppo, editors, *Types for Proofs and Programs*, volume 1158 of *Lecture Notes in Computer Science*, pages 62–75. Springer, Berlin, 1996.
- [199] S. Centrone, S. Negri, D. Sarikaya, and P. Schuster, editors. Mathesis Universalis, Computability and Proof, volume 412 of Synthese Library. Springer, Cham, 2019.
- [200] Stefania Centrone. Conceptions of Proof from Aristotle to Gentzen's Calculi. In Klaus Mainzer, Peter Schuster, and Helmut Schwichtenberg, editors, *Proof and Computation II. From Proof Theory and Univalent Mathematics to Program Extraction and Verification*. World Scientific, Singapore, 2021. Forthcoming.
- [201] Alexander Chagrov and Michael Zakharyaschev. Modal logic, 1997.
- [202] Kostia Chardonnet, Alexis Saurin, and Benoît Valiron. Toward a curry-howard equivalence for linear, reversible computation - work-in-progress. In Ivan Lanese and Mariusz Rawski, editors, Reversible Computation - 12th International Conference, RC 2020, Oslo, Norway, July 9-10, 2020, Proceedings, volume 12227 of Lecture Notes in Computer Science, pages 144-152. Springer, 2020.
- [203] Ray-Ming Chen and Michael Rathjen. Lifschitz realizability for intuitionistic zermelo-fraenkel set theory. Arch. Math. Logic, 51:789–818, 2012.
- [204] Timothy Y. Chow. The Consistency of Arithmetic. Math. Intelligencer, 41(1):22–30, 2019.
- [205] F. Chyzak, A. Quadrat, and D. Robertz. Effective algorithms for parametrizing linear control systems over Ore algebras. *Appl. Algebra Engrg. Comm. Comput.*, 16(5):319–376, 2005.
- [206] Frédéric Chyzak, Alban Quadrat, and Daniel Robertz. OreModules: a symbolic package for the study of multidimensional linear systems. In Applications of time delay systems, volume 352 of Lecture Notes in Control and Inform. Sci., pages 233–264. Springer, Berlin, 2007.
- [207] Agata Ciabattoni. On Urquhart's C logic. In 30th IEEE International Symposium on Multiple-Valued Logic (ISMVL 2000) (Portland, OR), pages 113–118. IEEE Computer Soc., Los Alamitos, CA, 2000.
- [208] Agata Ciabattoni, Paolo Maffezioli, and Lara Spendier. Hypersequent and labelled calculi for intermediate logics. In International Conference on Automated Reasoning with Analytic Tableaux and Related Methods, pages 81–96. Springer, 2013.
- [209] Roberto L. O. Cignoli, Itala M. L. D'Ottaviano, and Daniele Mundici. Algebraic foundations of many-valued reasoning, volume 7 of Trends in Logic—Studia Logica Library. Kluwer Academic Publishers, Dordrecht, 2000.
- [210] Petr Cintula and Noguera Carles. The proof by cases property and its variants in structural consequence relations. Studia Logica, 101(4):713–747, 2013.

- [211] Francesco Ciraulo. A constructive semantics for non-deducibility. MLQ Math. Log. Q., 54:35-48, 2008.
- [212] Francesco Ciraulo, Maria Emilia Maietti, and Giovanni Sambin. Convergence in formal topology: a unifying notion. J. Log. Anal., 5(2):1–45, 2013.
- [213] Francesco Ciraulo, Davide Rinaldi, and Peter Schuster. Lindenbaum's lemma via open induction. In R. Kahle, T. Strahm, and T. Studer, editors, Advances in Proof Theory, volume 28 of Progress in Computer Science and Applied Logic, pages 65–77. Springer International Publishing Switzerland, Cham, 2016.
- [214] Francesco Ciraulo and Giovanni Sambin. Finitary formal topologies and Stone's representation theorem. *Theoret. Comput. Sci.*, 405(1–2):11–23, 2008.
- [215] Francesco Ciraulo and Giovanni Sambin. Finiteness in a minimalist foundation. In *Types for proofs and programs*, volume 4941 of *Lecture Notes in Comput. Sci.*, pages 51–68. Springer, Berlin, 2008.
- [216] Francesco Ciraulo and Giovanni Sambin. A constructive Galois connection between closure and interior. J. Symb. Log., 77(4):1308–1324, 2012.
- [217] Pete L. Clark. Commutative algebra, 2021.
- [218] Thomas Cluzeau and Alban Quadrat. Factoring and decomposing a class of linear functional systems. *Linear Algebra Appl.*, 428(1):324–381, 2008.
- [219] Thomas Cluzeau and Alban Quadrat. Oremorphisms: A homological algebraic package for factoring, reducing and decomposing linear functional systems. chapter of the book "Topics in Time-Delay Systems: Analysis, Algorithms and Control", J.-J. Loiseau, W. Michiels, S.-I. Niculescu, R. Sipahi, Lecture Notes in Control and Information Sciences (LNCIS), Springer, to appear, 2008.
- [220] Bob Coecke. Quantum logic in intuitionistic perspective. Studia Logica, 70(3):411-440, 2002.
- [221] Cyril Cohen, Thierry Coquand, Simon Huber, and Anders Mörtberg. Cubical type theory: a constructive interpretation of the univalence axiom. In 21st International Conference on Types for Proofs and Programs, TYPES 2015, 2015.
- [222] Paul M. Cohn. Universal Algebra. Harper & Row, New York, 1965.
- [223] Almudena Colacito and George Metcalfe. Proof theory and ordered groups. In Juliette Kennedy and Ruy J.G.B. de Queiroz, editors, *Logic, Language, Information, and Computation*, pages 80–91, Berlin, 2017. Springer.
- [224] Almudena Colacito and George Metcalfe. Ordering groups and validity in lattice-ordered groups. J. Pure Appl. Algebra, 223(12):5163–5175, 2019.
- [225] Willem Conradie and Valentin Goranko. Algorithmic correspondence and completeness in modal logic. iv. semantic extensions of sqema. *Journal of Applied Non-Classical Logics*, 18(2-3):175–211, 2008.
- [226] Robert Constable and Mark Bickford. Intuitionistic completeness of first-order logic. Ann. Pure Appl. Logic, 165:164–198, 2014.
- [227] Jacob Cook and Michael Rathjen. Ordinal analysis of intuitionistic power and exponentiation Kripke Platek set theory. In T. Studer R. Kahle, T. Strahm, editor, Advances in Proof Theory, number 28 in Progress in Computer Science and Applied Logic, pages 79–172. Birkhuser Verlag, 2016.
- [228] Thierry Coquand. Inner models of univalence. Invited talk, LICS 2018.
- [229] Thierry Coquand. A survey of constructive presheaf models of univalence. ACM SIGLOG News, 5:54-65.
- [230] Thierry Coquand. Univalent type theory and modular formalization of mathematics. Slides of a talk given in Cambridge, July 2017.
- [231] Thierry Coquand. The Zariski spectrum of a ring. Initial MALOA Training Workshop, September 2010, Fischbachau. Workshop presentation.
- [232] Thierry Coquand. Constructive topology and combinatorics. In Constructivity in Computer Science (San Antonio, TX, 1991), volume 613 of Lecture Notes in Comput. Sci., pages 159–164. Springer, Berlin, 1992.
- [233] Thierry Coquand. An analysis of ramsey s theorem. Inform. and Comput., 110(2):297–304, 1994.
- [234] Thierry Coquand. Minimal invariant spaces in formal topology. J. Symbolic Logic, 62(3):689–698, 1997.
- [235] Thierry Coquand. A note on the open induction principle. Technical report, Göteborg University, 1997.
- [236] Thierry Coquand. Two applications of Boolean models. Arch. Math. Logic, 37:143–147, 1997.
- [237] Thierry Coquand. Measure on lattices, 1998.

- [238] Thierry Coquand. On the measure problem, 1998.
- [239] Thierry Coquand. Two applications of Boolean models. Arch. Math. Logic, 37:143–147, 1998.
- [240] Thierry Coquand. A direct proof of the localic Hahn-Banach theorem, 2000.
- [241] Thierry Coquand. Lewis Carroll, Gentzen and entailment relations, 2000.
- [242] Thierry Coquand. Topology and sequent calculus. Conference presentation, June 2000. Topology in Computer Science: Constructivity; Asymmetry and Partiality; Digitization. Dagstuhl.
- [243] Thierry Coquand. Compact spaces and distributive lattices. J. Pure Appl. Algebra, 184:1–6, 2003.
- [244] Thierry Coquand. A syntactical proof of the Marriage Lemma. Theoret. Comput. Sci., 290(1):1107–1113, 2003.
- [245] Thierry Coquand. Sur un théorème de Kronecker concernant les variétés algébriques. C. R. Math. Acad. Sci. Paris, 338(4):291–294, 2004.
- [246] Thierry Coquand. About Stone's notion of spectrum. J. Pure Appl. Algebra, 197(1-3):141-158, 2005.
- [247] Thierry Coquand. About Stone's notion of spectrum. Journal of Pure and Applied Algebra, 197(1-3):141–158, 2005.
- [248] Thierry Coquand. A completeness proof for geometrical logic. In P. Hájek, L. Valdés-Villanueva, and D. Westerståhl, editors, *Logic, Methodology and Philosophy of Science. Proceedings of the Twelfth International Congress*, pages 79–90, London, 2005. King's College Publications.
- [249] Thierry Coquand. A direct proof of the Dedekind-Mertens Lemma, 2006.
- [250] Thierry Coquand. Geometric Hahn-Banach theorem. Math. Proc. Cambridge Philos. Soc., 140:313-315, 2006.
- [251] Thierry Coquand. Geometric Hahn-Banach theorem. Math. Proc. Cambridge Philos. Soc., 140(2):313-315, 2006.
- [252] Thierry Coquand. On seminormality. J. Algebra, 305:577–584, 2006.
- [253] Thierry Coquand. Space of valuations. Ann. Pure Appl. Logic, 157:97–109, 2009.
- [254] Thierry Coquand. Space of valuations. Annals of Pure and Applied Logic, 157(2-3):97–109, 2009.
- [255] Thierry Coquand. Canonicity and normalisation for dependent type theory. To appear, 2018.
- [256] Thierry Coquand. Combinatorial topology and constructive mathematics. Indag. Math. (N.S.), 29(6):1637–1648, 2018.
- [257] Thierry Coquand. Lorenzen and constructive mathematics. In Gerhard Heinzmann and Gereon Wolters, editors, Paul Lorenzen: Mathematician and Logician, volume 51 of Log. Epistemol. Unity Sci., pages 47–61. Springer, Cham, 2021.
- [258] Thierry Coquand, Lionel Ducos, Henri Lombardi, and Claude Quitté. L'idéal des coefficients du produit de deux polynômes. Revue des Mathématiques de l'Enseignement Supérieur, 113(3):25–39, 2003.
- [259] Thierry Coquand, Lionel Ducos, Henri Lombardi, and Claude Quitté. Constructive Krull dimension. I: Integral extensions. J. Algebra Appl., 8(1):129–138, 2009.
- [260] Thierry Coquand and Simon Huber. Homotopy Canonicity for Cubical Type Theory. In Herman Geuvers, editor, 4th International Conference on Formal Structures for Computation and Deduction, volume 131 of LIPIcs. Leibniz Int. Proc. Inform., pages 11:1–11:23. Schloss Dagstuhl. Leibniz-Zent. Inform., Wadern, 2019.
- [261] Thierry Coquand, Simon Huber, and Anders Mörtberg. On higher inductive types in cubical type theory. In LICS '18 Proceedings of the 33rd Annual ACM/IEEE Symposium on Logic in Computer Science, pages 255–264, 2018.
- [262] Thierry Coquand and Gérard P. Huet. The calculus of constructions. Inf. Comput., 76:95–120, 1988.
- [263] Thierry Coquand and Henri Lombardi. Hidden constructions in abstract algebra, Krull Dimension, Going Up, Going Down. Technical report, Göteborg University, 2001.
- [264] Thierry Coquand and Henri Lombardi. Krull's Principal Ideal Theorem. Technical report, Institut Mittag-Leffler, 2001.
- [265] Thierry Coquand and Henri Lombardi. Hidden constructions in abstract algebra: Krull dimension of distributive lattices and commutative rings. In M. Fontana, S.-E. Kabbaj, and S. Wiegand, editors, Commutative Ring Theory and Applications, volume 231 of Lect. Notes Pure Appl. Mathematics, pages 477–499, Reading, MA, 2002. Addison-Wesley.
- [266] Thierry Coquand and Henri Lombardi. A short proof for the Krull dimension of a polynomial ring. Amer. Math. Monthly, 112(9):826–829, 2005.

- [267] Thierry Coquand and Henri Lombardi. A logical approach to abstract algebra. MSCS. Mathematical Structures in Computer Science, 16(5):885–900, 2006.
- [268] Thierry Coquand and Henri Lombardi. A logical approach to abstract algebra. Math. Structures Comput. Sci., 16:885–900, 2006.
- [269] Thierry Coquand and Henri Lombardi. Anneaux à diviseurs et anneaux de Krull (une approche constructive). Comm. Algebra, 44(2):515–567, 2016.
- [270] Thierry Coquand and Henri Lombardi. Some remarks about normal rings. In D. Probst and P. Schuster, editors, Concepts of Proof in Mathematics, Philosophy, and Computer Science, volume 6 of Ontos Mathematical Logic, pages 141–149. Walter de Gruyter, Berlin, 2016.
- [271] Thierry Coquand, Henri Lombardi, and Stefan Neuwirth. Lorenzen's theory of divisibility. Preprint, 2016.
- [272] Thierry Coquand, Henri Lombardi, and Stefan Neuwirth. Lattice-ordered groups generated by an ordered group and regular systems of ideals. *Rocky Mountain J. Math.*, 49(5):1449–1489, 2019.
- [273] Thierry Coquand, Henri Lombardi, and Stefan Neuwirth. Regular entailment relations. In Gerhard Heinzmann and Gereon Wolters, editors, *Paul Lorenzen: Mathematician and Logician*, volume 51 of *Log. Epistemol. Unity Sci.*, pages 103–114. Springer, Cham, 2021.
- [274] Thierry Coquand, Henri Lombardi, and Claude Quitté. Generating non noetherian modules constructively. Manuscripta Mathematica, 115:513–520, 2004.
- [275] Thierry Coquand, Henri Lombardi, and Claude Quitté. Dimension de Heitmann des treillis distributifs et des anneaux commutatifs. *Publications Mathématiques de Besançon. Algèbre et Théorie des Nombres*, pages 57–100, 2006.
- [276] Thierry Coquand, Henri Lombardi, and Claude Quitté. Curves and coherent Prüfer rings. J. Symbolic Comput., 45(12):1378–1390, 2010.
- [277] Thierry Coquand, Henri Lombardi, and Marie-Françoise Roy. An elementary characterisation of Krull dimension. In L. Crosilla and P. Schuster, editors, From Sets and Types to Topology and Analysis, volume 48 of Oxford Logic Guides, pages 239–244. Oxford University Press, 2005.
- [278] Thierry Coquand, Henri Lombardi, and Peter Schuster. A nilregular element property. Archiv Math., 85:49–54, 2005.
- [279] Thierry Coquand, Henri Lombardi, and Peter Schuster. The projective spectrum as a distributive lattice. Cah. Topol. Géom. Différ. Catég., 48:220–228, 2007.
- [280] Thierry Coquand, Henri Lombardi, and Peter Schuster. Spectral schemes as ringed lattices. *Ann. Math. Artif. Intell.*, 56:339–360, 2009.
- [281] Thierry Coquand and Bassel Mannaa. The Independence of Markov's Principle in Type Theory. *Logical Methods in Computer Science*, Volume 13, Issue 3, 2017.
- [282] Thierry Coquand, Bassel Mannaa, and Fabian Ruch. Stack semantics of type theory. In 2017 32nd Annual ACM/IEEE Symposium on Logic in Computer Science (LICS).
- [283] Thierry Coquand and Stefan Neuwirth. An introduction to Lorenzen's "Algebraic and logistic investigations on free lattices" (1951). Preprint, 2017.
- [284] Thierry Coquand and Henrik Persson. Gröbner bases in type theory. In T. Altenkirch, B. Reus, and W. Naraschewski, editors, *Types for Proofs and Programs*, pages 33–46. Springer, 1998.
- [285] Thierry Coquand and Henrik Persson. Integrated development of algebra in type theory. Calculemus and Types Workshop, 98, 1998.
- [286] Thierry Coquand and Henrik Persson. Gröbner bases in type theory. In T. Altenkirch, W. Naraschewski, and B. Reus, editors, Types for Proofs and Programs (Irsee, 1998), volume 1657 of Lecture Notes in Comput. Sci., pages 33–46. Springer, Berlin, 1999.
- [287] Thierry Coquand and Henrik Persson. Valuations and Dedekind's Prague theorem. J. Pure Appl. Algebra, 155(2–3):121–129, 2001.
- [288] Thierry Coquand and Claude Quitté. Constructive finite free resolutions. *Manuscripta Mathematica*, 137(3-4):331–345, 2012.
- [289] Thierry Coquand and Claude Quitté. Constructive finite free resolutions. Manuscripta Mathematica, 137(3-4):331–345, 2012.
- [290] Thierry Coquand, Sara Sadocco, Giovanni Sambin, and Jan M. Smith. Formal topologies on the set of first-order formulae. *J. Symb. Log.*, 65(3):1183–1192, 2000.

- [291] Thierry Coquand, Giovanni Sambin, Jan Smith, and Silvio Valentini. Inductively generated formal topologies. Ann. Pure Appl. Logic, 124:71–106, 2003.
- [292] Thierry Coquand and Peter Schuster. Unique paths as formal points. J. Log. Anal., 3(6):1–9, 2011.
- [293] Thierry Coquand and Jan M. Smith. An application of constructive completeness. In S. Berardi and M. Coppo, editors, Types for proofs and programs (Torino, 1995), volume 1158 of Lecture Notes in Comput. Sci., pages 76–84. Springer, Berlin, 1996.
- [294] Thierry Coquand and Bas Spitters. A constructive proof of the Peter-Weyl theorem. Math. Log. Q., 51(4):351–359, 2005.
- [295] Thierry Coquand and Bas Spitters. Formal topology and constructive mathematics: the Gelfand and Stone–Yosida representation theorems. *J.UCS*, 11(12):1932–1944, 2005.
- [296] Thierry Coquand and Bas Spitters. Formal topology and constructive mathematics: the Gelfand and Stone-Yosida representation theorems. *Journal of Universal Computer Science*, 11(12):1932–1944, 2005.
- [297] Thierry Coquand and Bas Spitters. Constructive Gelfand duality for C*-algebras. Mathematical Proceedings of the Cambridge Philosophical Society, 147(2):339–344, 2009.
- [298] Thierry Coquand and Bas Spitters. Constructive theory of banach algebras. J. Log. Anal., 10, 2010.
- [299] Thierry Coquand and Bas Spitters. A constructive proof of Simpson's rule. J. Log. Anal., 4, 2012.
- [300] Thierry Coquand and Claire Tête. An elementary proof of Wiebe's Theorem. J. Algebra, 499:103–110, 2018.
- [301] Thierry Coquand and Guo-Qiang Zhang. Sequents, frames, and completeness. In Helmut Schwichtenberg and Peter G. Clote, editors, Computer Science Logic. 14th International Workshop, CSL 2000 Annual Conference of the EACSL.
- [302] Thierry Coquand and Guo-Qiang Zhang. Sequents, frames, and completeness. In Peter G. Clote and Helmut Schwichtenberg, editors, Computer Science Logic (Fischbachau, 2000), volume 1862 of Lecture Notes in Comput. Sci., pages 277–291. Springer, Berlin, 2000.
- [303] Thierry Coquand and Guo-Qiang Zhang. A representation of stably compact spaces, and patch topology. *Theoret. Comput. Sci.*, 305(1-3):77–84, 2003.
- [304] Michel Coste, Henri Lombardi, and Marie-Françoise Roy. Dynamical method in algebra: Effective Nullstellensätze. Ann. Pure Appl. Logic, 111(3):203–256, 2001.
- [305] Michel Coste, Henri Lombardi, and Marie-Françoise Roy. Dynamical method in algebra: Effective Nullstellensätze. Ann. Pure Appl. Logic, 111(3):203–256, 2001.
- [306] Michel Coste and Marie-Françoise Roy. Thom's lemma, the coding of real algebraic numbers and the computation of the topology of semi-algebraic sets. *JSC*, 5:121–129, 1988.
- [307] Henry H. Crapo and Gian-Carlo Rota. On the Foundations of Combinatorial Theory: Combinatorial Geometries (preliminary edition). M.I.T. Press, Cambridge, Massachusetts, 1970.
- [308] Laura Crosilla. Set Theory: Constructive and Intuitionistic ZF. In Edward N. Zalta, editor, The Stanford Encyclopedia of Philosophy. Metaphysics Research Lab, Stanford University, spring 2019 edition, 2019.
- [309] Laura Crosilla and Peter Schuster. Finite Methods in Mathematical Practice. In G. Link, editor, Formalism and Beyond. On the Nature of Mathematical Discourse, volume 23 of Logos, pages 351–410. Walter de Gruyter, Boston and Berlin, 2014.
- [310] Giovanni Curi. On some peculiar aspects of the constructive theory of point-free spaces. Math. Log. Quart., 56(4):375–387, 2010.
- [311] Giovanni Curi. On the existence of Stone-Čech compactification. J. Symbolic Logic, 2010.
- [312] Giovanni Curi. On Tarski's fixed point theorem. Proc. Amer. Math. Soc., 143(10):4439-4455, 2015.
- [313] Giovanni Curi and Michael Rathjen. Formal Baire Space in Constructive Set Theory. In Ulrich Berger, Hannes Diener, Peter Schuster, and Monika Seisenberger, editors, Logic, Construction, Computation, volume 3 of ontos mathematical logic. ontos verlag, 2012.
- [314] Janusz Czelakowski. Matrices, primitive satisfaction and finitely based logics. Studia Logica, 42:89–104, 1983.
- [315] Janusz Czelakowski. Protoalgebraic Logics, volume 10 of Trends in Logic. Kluwer Academic Publishers, Dordrecht, 2001.
- [316] Francesco Dagnino and Giuseppe Rosolini. Doctrines, modalities and comonads. *Math. Structures Comput. Sci.*, 31(7):769–798, 2021.

- [317] Tiziano Dalmonte, Sara Negri, Nicola Olivetti, and Gian Luca Pozzato. Pronom: proof-search and countermodel generation for non-normal modal logics, 2019.
- [318] Anupam Das. On the logical complexity of cyclic arithmetic. Log. Methods Comput. Sci., 16(1), 2020.
- [319] René David, Karim Nour, and Christophe Raffalli. *Introduction à la Logique. Théorie de la démonstration*. Dunod, Paris, second edition, 2003.
- [320] Martin Davis. A relativity principle in quantum mechanics. Int. J. Theor. Phys., 16:867–874, 1978.
- [321] Tom de Jong and Martín Hötzel Escardó. Predicative Aspects of Order Theory in Univalent Foundations. In Naoki Kobayashi, editor, 6th International Conference on Formal Structures for Computation and Deduction (FSCD 2021), volume 195 of Leibniz International Proceedings in Informatics (LIPIcs), pages 8:1–8:18, Dagstuhl, Germany, 2021. Schloss Dagstuhl Leibniz-Zentrum für Informatik.
- [322] Hans De Nivelle and Jia Meng. Geometric resolution: A proof procedure based on finite model search. In *International Joint Conference on Automated Reasoning*, pages 303–317. Springer, 2006.
- [323] Pierre Deligne. What do we mean by "equal", 2018. Seminar talk. Voevodsky memorial conference, Institute for Advanced Study, Princeton.
- [324] Charles N. Delzell. Kreisel's Unwinding of Artin's Proof. In Piergiorgio Odifreddi, editor, Kreiseliana. About and Around Georg Kreisel, pages 113–246. A K Peters, Wellesley, MA, 1996.
- [325] Charles N. Delzell, Laureano González-Vega, and Henri Lombardi. A continuous and rational solution to Hilbert's 17th problem and several cases of the Positivstellensatz. In Frédéric Eyssette and André Galligo, editors, *Computational Algebraic Geometry*, pages 61–75. Birkhäuser, Boston, MA, 1993.
- [326] David Deutsch, Artur Ekert, and Rossella Lupacchini. Machines, logic and quantum physics. *Bull. Symb. Log.*, 6(3):265–283, 2000.
- [327] Keith J. Devlin. Constructibility, volume 6 of Perspectives in Mathematical Logic. Springer, Berlin etc., 1984.
- [328] Gema Díaz-Toca, Laureano González-Vega, Henri Lombardi, and Claude Quitté. Modules projectifs de type fini, applications linéaires croisées et inverses généralisés. *J. Algebra*, 303:450–475, 2006.
- [329] Reinhard Diestel. Graph Theory, volume 173 of Graduate Texts in Mathematics. Springer, Berlin, fifth edition, 2017.
- [330] J. Dieudonn and A. Grothendieck. Iments de gomtrie algbrique: Iv. tude locale des schmas et des morphismes de schmas, seconde partie. *Publ. Math. Inst. Hautes tudes Sci.*, 24, 1965.
- [331] Gabriel Andrew Dirac. Extensions of Menger's theorem. J. Lond. Math. Soc., 38:148–161, 1963.
- [332] Gabriel Andrew Dirac. Short proof of Menger's graph theorem. Mathematika, 13(1):42-44, 1966.
- [333] H. Dishkant. Semantics of the minimal logic of quantum mechanics. Studia Logica: An International Journal for Symbolic Logic, 30:23–32, 1972.
- [334] Christoph Dittmann. Menger's Theorem. Archive of Formal Proofs, 2017. http://isa-afp.org/entries/Menger.html, Formal proof development.
- [335] Christian Doczkal. Short proof of Menger's Theorem in Coq (Proof Pearl). Technical report, 2019.
- [336] Graciela Domenech, Hector Freytes, and Christian de Ronde. Kripke-style semantic for modal orthomodular logic. 2008.
- [337] David Donaldson and John A. Weymark. A quasiordering is the intersection of orderings. *J. Econom. Theory*, 78:382–387, 1998.
- [338] Jean Della Dora, Claire Dicrescenzo, and Dominique Duval. About a new method for computing in algebraic number fields. In European Conference on Computer Algebra (2), pages 289–290, 1985.
- [339] Andreas Döring and Chris J. Isham. A topos foundation for theories of physics. I. Formal languages for physics. J. Math. Phys., 49(5):053515, 25, 2008.
- [340] Andreas Döring and Chris J. Isham. A topos foundation for theories of physics: IV. Categories of systems. J. Math. Phys., 49(5):053518, 29, 2008.
- [341] Kosta Došen. On passing from singular to plural consequences. In Ewa Orlowska, editor, *Logic at Work: Essays Dedicated to the Memory of Helena Rasiowa*, volume 24 of *Stud. Fuzziness Soft Comput.*, pages 533–547. Physica, Heidelberg, 1999.
- [342] Kosta Došen. On sets of premises. In D. Probst and P. Schuster, editors, Concepts of Proof in Mathematics, Philosophy, and Computer Science, volume 6 of Ontos Mathematical Logic, pages 151–162. Walter de Gruyter, Berlin, 2016.

- [343] Albert G. Drágalin. A completeness theorem for higher-order intuitionistic logic: an intuitionistic proof. In *Mathematical logic and its applications (Druzhba, 1986)*, pages 107–124. Plenum, New York, 1987.
- [344] Albert G. Drágalin. Explicit algebraic models for constructive and classical theories with non-standard elements. Studia Logica, 55:33-61, 1995.
- [345] Didier Dubois, Francesc Esteva, Lluís Godo, and Henri Prade. Fuzzy-set based logic an history-oriented presentation of their main developments. In Dov M. Gabbay and J. Woods, editors, The Many Valued and Nonmonotonic Turn in Logic, volume 8 of Handbook of the History of Logic, pages 325–449. North-Holland, Amsterdam, 2007.
- [346] Lionel Ducos. Sur les théorèmes de Serre, Bass et Forster-Swan. C. R. Math. Acad. Sci. Paris, 339(8):539-542, 2004.
- [347] Lionel Ducos, Henri Lombardi, Claude Quitté, and Maimouna Salou. Théorie algorithmique des anneaux arithmétiques, de Prüfer et de Dedekind. *J. Algebra*, 281:604–650, 2004.
- [348] Lionel Ducos and Claude Quitté. Dimension de Krull: extension entière, anneaux noethériens. Technical Report 194, Département de Mathématiques, Université de Poitiers, 2006.
- [349] Ben Dushnik and Miller E. W. Partially ordered sets. Amer. J. Math., 63(3):600–610, 1941.
- [350] Peter Dybjer. A general formulation of simultaneous inductive-recursive definitions in type theory, 1994. Preprint, 21 pages.
- [351] Peter Dybjer and Anton Setzer. Induction-recursion and initial algebras. Ann. Pure Appl. Logic, 124:1–47, 2003.
- [352] Peter Dybjer and Anton Setzer. Indexed induction-recursion. 66(1):1–49, 2006.
- [353] Roy Dyckhoff. Contraction-free sequent calculi for intuitionistic logic. J. Symbolic Logic, 57(3):795–807, 1992.
- [354] Roy Dyckhoff and Stéphane Lengrand. Ljq: a strongly focused calculus for intuitionistic logic. In *Conference on Computability in Europe*, pages 173–185, 2006.
- [355] Roy Dyckhoff and Sara Negri. Decision methods for linearly ordered Heyting algebras. Arch. Math. Logic, 45:411–422, 2006.
- [356] Roy Dyckhoff and Sara Negri. Proof analysis in intermediate logics. Archive Math. Logic, 51(1-2):71-92, 2012.
- [357] Roy Dyckhoff and Sara Negri. Geometric rules in infinitary logic, 2014. Unpublished note.
- [358] Roy Dyckhoff and Sara Negri. Geometrisation of first-order logic. Bull. Symb. Log., 21(2):123–163, 2015.
- [359] Roy Dyckhoff and Sara Negri. Geometrization of first-order logic. Bull. Symbolic Logic, 21:123–163, 2015.
- [360] Roy Dyckhoff and Sara Negri. A cut-free sequent system for Grzegorczyk logic, with an application to the Gödel–McKinsey-Tarski embedding. J. Logic Comput., 26(1):169–187, 2016.
- [361] Roy Dyckhoff and Sara Negri. Commentary on Grigori Mints' "Classical and Intuitionistic Geometric Logic". IfCoLog Journal of Logics and their Applications, 4:1235–1239, 2017.
- [362] Heinz-Dieter Ebbinghaus. Zahlen. Grundwissen Mathematik. Springer, 1992.
- [363] Harold M. Edwards. The genesis of ideal theory. Arch. Hist. Exact Sci., 23(4):321–378, 1980/81.
- [364] Harold M. Edwards. Dedekind's invention of ideals. Bull. London Math. Soc., 15(1):8–17, 1983.
- [365] Harold M. Edwards. Dedekind's invention of ideals. In Studies in the history of mathematics, volume 26 of MAA Stud. Math., pages 8–20. Math. Assoc. America, Washington, DC, 1987.
- [366] Harold M. Edwards. Divisor Theory. Birkhäuser, Boston, MA, 1990.
- [367] Harold M. Edwards. Mathematical ideas, ideals, and ideology. Math. Intelligencer, 14(2):6–19, 1992.
- [368] Harold M. Edwards. Essays in Constructive Mathematics. Springer, New York, 2005.
- [369] Uwe Egly and Hans Tompits. Gentzen-like methods in quantum logic. In TABLEAUX'99, 1999.
- [370] D. Eisenbud. Commutative Algebra with a View Toward Algebraic Geometry, volume 150 of Grad. Texts in Math. Springer, 1995.
- [371] David Eisenbud. Commutative Algebra, volume 150 of Graduate Texts in Mathematics. Springer-Verlag, New York, 1995. With a View Toward Algebraic Geometry.
- [372] David Eisenbud and E. Graham Evans, Jr. Every algebraic set in n-space is the intersection of n hypersurfaces. Invent. Math., 19:107–112, 1973.

- [373] David Eisenbud and Joe Harris. Schemes. The Wadsworth & Brooks/Cole Mathematics Series. Wadsworth & Brooks/Cole Advanced Books & Software, Pacific Grove, CA, 1992. The language of modern algebraic geometry.
- [374] David Eisenbud and Joe Harris. The Geometry of Schemes, volume 197 of Graduate Texts in Mathematics. Springer-Verlag, New York, 2000.
- [375] David Eisenbud and Joe Harris. The Geometry of Schemes. Springer, New York, 2000.
- [376] Afef Ellouz, Henri Lombardi, and Ihsen Yengui. A dynamical comparison between the rings $\mathbf{R}(x)$ and $\mathbf{R}\langle x \rangle$, 2007.
- [377] Jacopo Emmenegger, Fabio Pasquali, and Giuseppe Rosolini. Elementary doctrines as coalgebras. *J. Pure Appl. Algebra*, 224(12):106445, 16, 2020.
- [378] Ali Enayat and Albert Visser. New constructions of satisfaction classes. Logic Group Preprint Series, 303, 2013.
- [379] Sebastian Enqvist. A circular proof system for the hybrid μ-calculus. In Nicola Olivetti, Rineke Verbrugge, Sara Negri, and Gabriel Sandu, editors, 13th Conference on Advances in Modal Logic, AiML 2020, Helsinki, Finland, August 24-28, 2020, pages 169–188. College Publications, 2020.
- [380] Sebastian Enqvist, Helle Hvid Hansen, Clemens Kupke, Johannes Marti, and Yde Venema. Completeness for game logic. In 34th Annual ACM/IEEE Symposium on Logic in Computer Science, LICS 2019, Vancouver, BC, Canada, June 24-27, 2019, pages 1–13. IEEE, 2019.
- [381] Marcel Erné. Prime ideal theory for general algebras. *Appl. Categ. Structures*, 8:115–144, 2000. Papers in honour of Bernhard Banaschewski (Cape Town, 1996).
- [382] Marcel Erné. Distributors and Wallman locales. Houston J. Math., 34(1):69–98, 2008.
- [383] Paul Ernest. Mathematics, ethics and purism: an application of MacIntyre's virtue theory. Synthese, 2020.
- [384] Martín Escardó and Paulo Oliva. The Peirce translation. Ann. Pure Appl. Logic, 163:681–692, 2012.
- [385] Luis Español. The spectrum lattice of Baer rings and polynomials. In Categorical Algebra and its Applications: Proceedings of a Conference, held in Louvain-La-Neuve, Belgium, July 26 August 1, 1987, volume 1348 of Lecture Notes in Mathematics, pages 118–124. Springer-Verlag Berlin Heidelberg, 1988.
- [386] Luis Español. Constructive Krull dimension of lattices. Rev. Acad. Cienc. Zaragoza (2), 37:5–9, 1982.
- [387] Luis Español. Le spectre d'un anneau dans l'algèbre constructive et applications à la dimension. Cah. Topol. Géom. Différ. Catég., 24:133–144, 1983.
- [388] Luis Español. Spectrum lattice and regularisation of rings. Technical report, Universidad de Zaragoza, 1987.
- [389] Luis Español. Finite chain calculus in distributive lattices and elementaryKrull dimension. In Laureano Lambán, Ana Romero, and Julio Rubio, editors, Contribuciones científicas en honor deMirian Andrés Gómez, pages 273–285. Servicio de Publicaciones Universidad de La Rioja, Logroño, 2010.
- [390] Christian Espíndola. Semantic completeness of first-order theories in constructive reverse mathematics. *Notre Dame J. Formal Logic*. to appear.
- [391] Christian Espíndola. A short proof of Glivenko theorems for intermediate predicate logics. Archive for Mathematical Logic, 52(7-8):823–826, 2013.
- [392] Francesc Esteva and Lluís Godo. Monoidal t-norm based logic: towards a logic for left-continuous t-norms. Fuzzy sets and systems, 124(3):271–288, 2001.
- [393] R. Evans, M. Sergot, and A. Stephenson. Formalizing Kant's rules. A logic of conditional imperatives and permissives. J. Philos. Log., 49(4):613–680, 2020.
- [394] Anna Fabiańska and Alban Quadrat. Applications of the Quillen–Suslin theorem to multidimensional systems theory. In *Gröbner bases in control theory and signal processing*, volume 3 of *Radon Ser. Comput. Appl. Math.*, pages 23–106. Walter de Gruyter, Berlin, 2007.
- [395] Solomon Feferman. Is the continuum hypothesis a definite mathematical problem? Draft of paper for the lecture to the Philosophy Dept., Harvard University, Oct. 5, 2011 in the Exploring the Frontiers of Incompleteness project series, Havard 20112012.
- [396] Solomon Feferman. Lectures on proof theory. In *Proceedings of the Summer School in Logic (Leeds, 1967)*, pages 1–107. Springer, Berlin, 1968.
- [397] Solomon Feferman. Hilbert's Program relativized: Proof-theoretical and foundational reductions. *J. Symb. Logic*, 53:364–384, 1988.
- [398] Solomon Feferman. Reflecting on incompleteness. Journal of Symbolic Logic, 56:1–49, 1991.

- [399] Solomon Feferman. The Impact of the Incompleteness Theorems on Mathematics. *Notices Amer. Math. Soc.*, 53(4):434–439, 2006.
- [400] Solomon Feferman. On the strength of some semi-constructive theories. In Ulrich Berger and Peter Schuster amd Monika Seisenberger, editors, *Logic*, *construction*, *computation*, volume 3 of *Ontos Math. Log.*, pages 201–225. Ontos Verlag, Heusenstamm, 2012.
- [401] Ulrich Felgner. Untersuchungen über das Zornsche Lemma. Compos. Math., 18:170–180, 1967.
- [402] Giulio Fellin. The Jacobson Radical: from Algebra to Logic. Master's thesis. Università di Verona, Dipartimento di Informatica, 2018.
- [403] Giulio Fellin, Sara Negri, and Eugenio Orlandelli. Glivenko sequent classes and constructive cut elimination in geometric logics. 2021. Submitted.
- [404] Giulio Fellin, Sara Negri, and Peter Schuster. Modal logic for induction. In Nicola Olivetti, Rineke Verbrugge, Sara Negri, and Gabriel Sandu, editors, Advances in Modal Logic, volume 13 of Advances in Modal Logic, pages 209–227, London, 2020. College Publications. Advances in Modal Logic 2020, Helsinki, Finland (on-line), August 24–28, 2020.
- [405] Giulio Fellin and Peter Schuster. A general Glivenko-Gödel theorem for nuclei. In Ana Sokolova, editor, *Proceedings* of the 37th Conference on the Mathematical Foundations of Programming Semantics, MFPS 2021, Salzburg, Austria, August 29–September 3, 2021, Electronic Notes in Theoretical Computer Science. Elsevier, 2021.
- [406] Giulio Fellin, Peter Schuster, and Daniel Wessel. The Jacobson radical of a propositional theory. 2019. Submitted.
- [407] Giulio Fellin, Peter Schuster, and Daniel Wessel. The Jacobson radical of a propositional theory. In Thomas Piecha and Peter Schroeder-Heister, editors, *Proof-Theoretic Semantics: Assessment and Future Perspectives. Proceedings of the Third Tübingen Conference on Proof-Theoretic Semantics, 27–30 March 2019*, pages 287–299. University of Tübingen, 2019.
- [408] Giulio Fellin, Peter Schuster, and Daniel Wessel. Glivenko's theorem for nuclei. Technical report, 2020.
- [409] Giulio Fellin, Peter Schuster, and Daniel Wessel. The Jacobson radical of a propositional theory. *Bull. Symbolic Logic*, 2021. forthcoming.
- [410] Fernando Ferreira. A simple proof of Parsons' theorem. Notre Dame J. Formal Logic, 46(1):83-91, 2005.
- [411] Fernando Ferreira and Paulo Oliva. Bounded functional interpretation. Ann. Pure Appl. Logic, 135:73–112, 2005.
- [412] Richard P Feynman. Simulating physics with computers. *International journal of theoretical physics*, 21(6/7):467–488, 1982.
- [413] Arthur Fine. Fictionalism. Midwest Stud. Phil., 18:1–18, 1993.
- [414] Peter Fishburn and Bernard Monjardet. Norbert Wiener on the Theory of Measurement (1914, 1915, 1921). J. Math. Psych., 36:165–184, 1992.
- [415] Peter C. Fishburn. Intransitive indifference with unequal indifference intervals. J. Math. Psych., 7:144–149, 1970.
- [416] Peter C. Fishburn. Utility Theory for Decision Making. Wiley, New York, 1970.
- [417] John Fisher and Marc Bezem. Skolem machines. Fund. Inform., 91(1):79–103, 2009.
- [418] John R. Fisher. CoFOL report and user guide, 2012.
- [419] Isidore Fleischer. A final remark on extending to strict total orders in modules. Bull. Austral. Math. Soc., 9(1):137–140, 1973.
- [420] J. M. Font, R. Jansana, and D. Pigozzi. A survey of abstract algebraic logic. Studia Logica, 74(1-2):13-97, 2003.
- [421] J. M. Font, R. Jansana, and D. Pigozzi. Update to "A survey of abstract algebraic logic". *Studia Logica*, 91(1):125–130, 2009.
- [422] Josep Maria Font. Taking degrees of truth seriously. Studia Logica, 91(3):383-406, 2009.
- [423] Otto Forster. Über die Anzahl der Erzeugenden eines Ideals in einem Noetherschen Ring. Math. Z., 84:80-87, 1964.
- [424] M. P. Fourman and D. Scott. Sheaves and logic. In M. P. Fourman, C. J. Mulvey, and D. S. Scott, editors, Applications of Sheaves. Proceedings of the Research Symposium on Applications of Sheaf Theory to Logic, Algebra and Analysis, Durham, July 9-21, 1977, pages 302-401. Springer-Verlag, Berlin, 1979.
- [425] Michael Fourman and Robin Grayson. Formal spaces. In *The L.E.J. Brouwer Centenary Symposium (Noordwijkerhout, 1981)*, volume 110 of *Stud. Logic Found. Math.*, pages 107–122. North-Holland, Amsterdam, 1982.

- [426] Christopher M. Fox. Point-set and Point-free Topology in Constructive Set Theory. Phd thesis, University of Manchester, School of Mathematics, 2005.
- [427] Torkel Franzén. Gödel's Theorem. An Incomplete Guide to its Use and Abuse. AK Peters, Wellesley, MA, 2005.
- [428] Torkel Franzén. The Popular Impact of Gödel's Incompleteness Theorem. Notices Amer. Math. Soc., 53(4):440–443, 2006.
- [429] Anton Freund and Michael Rathjen. Derivatives of normal functions in reverse mathematics. Annals of Pure and Applied Logic, 172:1–49, 2021.
- [430] Peter Freyd. Aspects of topoi. Bull. Austral. Math. Soc., 7(1):1–76, 1972.
- [431] Harvey Friedman. The consistency of classical set theory relative to a set theory with intuitionistic logic. *The Journal of Symbolic Logic*, 38(2):315–319, 1973.
- [432] Harvey Friedman. Set theoretic foundations for constructive analysis. Ann. of Math. (2), 105(1):1–28, 1977.
- [433] Harvey Friedman. Classical and intuitionistically provably recursive functions. In G.H. Müller and D.S. Scott, editors, *Higher Set Theory*, volume 669 of *LNM*, pages 21–27. Springer, New York, 1978.
- [434] Harvey Friedman. Classically and intuitionistically provably recursive functions. In Higher set theory (Proc. Conf., Math. Forschungsinst., Oberwolfach, 1977), volume 669 of Lecture Notes in Math., pages 21–27. Springer, Berlin, 1978.
- [435] Harvey Friedman and Andrej Ščedrov. Large sets in intuitionistic set theory. Ann. Pure Appl. Logic, 27(1):1–24, 1984.
- [436] Harvey M Friedman and Andrej Ščedrov. The lack of definable witnesses and provably recursive functions in intuitionistic set theories. Adv. Math., 57(1):1–13, 1985.
- [437] Harvey M. Friedman, Stephen G. Simpson, and Rick L. Smith. Countable algebra and set existence axioms. *Ann. Pure Appl. Logic*, 25:141–181, 1983.
- [438] Harvey M. Friedman, Stephen G. Simpson, and Rick L. Smith. Addendum to: "Countable algebra and set existence axioms" [Ann. Pure Appl. Logic 25 (1983) 141–181]. Ann. Pure Appl. Logic, 28:319–320, 1985.
- [439] Emanuele Frittaion and Michael Rathjen. Extensional realizability for intuitionistic set theory. *Journal of Logic and Computation*, 31:630–653, 2021.
- [440] Ladislaus Fuchs. Über die Ideale arithmetischer Ringe. Comment. Math. Helv., 23:334–341, 1949.
- [441] László Fuchs. Partially Ordered Algebraic Systems. Dover Publications, Mineola, New York, 2011.
- [442] Makoto Fujiwara, Hajime Ishihara, and Takako Nemoto. Some principles weaker than Markov's principle. *Arch. Math. Logic*, 54(7-8):861–870, 2015.
- [443] Dov M. Gabbay. Semantical investigations in Heyting's intuitionistic logic, volume 148 of Synthese Library. D. Reidel Publishing Co., Dordrecht-Boston, Mass., 1981.
- [444] Peter Gabriel and Friedrich Ulmer. Lokal präsentierbare Kategorien. Number 221 in Lecture Notes in Mathematics. Springer-Verlag, Berlin, 1971.
- [445] Nikolaos Galatos and Hiroakira Ono. Glivenko theorems for substructural logics over FL. J. Symbolic Logic, 71(4):1353–1384, 2006.
- [446] Nikolaos Galatos and Hiroakira Ono. Glivenko theorems for substructural logics over FL. The Journal of Symbolic Logic, 71(4):1353–1384, 2006.
- [447] Cesare Gallozzi. Homotopy Type Theoretic Interpretations of Constructive Set Theories. Phd thesis, University of Leeds, 2018.
- [448] Cesare Galozzi. Homotopy Type-Theoretic Interpretations of Constructive Set Theory. Phd thesis, University of Leeds, 2018.
- [449] Nicola Gambino. Types and sets: a study on the jump to full impredicativity. Laurea diss., Università di Padova, 1999.
- [450] Nicola Gambino. Sheaf Interpretations for Generalised Predicative Intuitionistic Systems. PhD thesis, University of Manchester. Department of Computer Science, 2002.
- [451] Nicola Gambino. Heyting-valued interpretations for Constructive Set Theory. Ann. Pure Appl. Logic, 137:164–188, 2006.
- [452] Nicola Gambino and Peter Aczel. The generalised type-theoretic interpretation of constructive set theory. J. Symb. Logic, 71(1):67–103, 2006.

- [453] Nicola Gambino and Peter Schuster. Spatiality for formal topologies. *Math. Structures Comput. Sci.*, 17(1):65–80, 2007.
- [454] Christine Gassner. The axiom of choice in second-order predicate logic. Math. Logic Quart., 40:533–546, 1994.
- [455] Carl Friedrich Gauß. Disquisitiones arithmeticae. Gerh. Fleischer, Leipzig, 1801.
- [456] Carl Friedrich Gauß. *Disquisitiones arithmeticae*. Springer-Verlag, New York, 1986. Translated and with a preface by Arthur A. Clarke, Revised by William C. Waterhouse, Cornelius Greither and A. W. Grootendorst and with a preface by Waterhouse.
- [457] Gerhard Gentzen. Untersuchungen über das logische Schließen I. Math. Z., 39:176-210, 1934.
- [458] Gerhard Gentzen. Untersuchungen über das logische Schließen II. Math. Z., 39:405–431, 1934.
- [459] Gerhard Gentzen. Die Widerspruchsfreiheit der reinen Zahlentheorie. Math. Ann., 112(1):493–565, 1936.
- [460] Gerhard Gentzen. Neue Fassung des Widerspruchsfreiheitsbeweises fr die reine Zahlentheorie. Forschungen zur Logik und zur Grundlegung der exakten Wissenschaften, 4:19–44, 1938.
- [461] Gerhard Gentzen. Über das Verhältnis zwischen intuitionistischer und klassischer Arithmetik. Arch. Math. Logik Grundlagenforsch., 16:119–132, 1974. Written in 1933.
- [462] Herman Geuvers, Freek Wiedijk, and Jan Zwanenburg. A constructive proof of the fundamental theorem of algebra without using the rationals. Callaghan, Paul et al. (eds.), Types for Proofs and Programs. International workshop, TYPES 2000, Durham, GB, December 8–12, 2000. Selected papers. Berlin: Springer. Lect. Notes Comput. Sci. 2277, 96–111 (2002), 2002.
- [463] G. Gierz, K. H. Hofmann, K. Keimel, J. D. Lawson, M. Mislove, and D. S. Scott. Continuous Lattices and Domains. Encyclopedia of Mathematics and its Applications. Cambridge University Press, 2003.
- [464] Gerhard Gierz and Klaus Keimel. A lemma on primes appearing in algebra and analysis. Houston J. Math., 3:207–224, 1977.
- [465] Robin Giles. A non-classical logic for physics. Studia Logica: An International Journal for Symbolic Logic, 33(4):397–415, 1974.
- [466] Philippe Gille and Tamás Szamuely. Central simple algebras and Galois cohomology, volume 101 of Cambridge Studies in Advanced Mathematics. Cambridge University Press, Coneambridge, 2006.
- [467] Robert Gilmer. Multiplicative Ideal Theory. Marcel Dekker, New York, 1972.
- [468] Robert William Gilmer and William James Heinzer. On the divisors of monic polynomials over a commutative ring. *Pacific J. Math.*, 78(1):121–131, 1978.
- [469] Jean-Yves Girard. Proofs and Types. Cambridge University Press, 1989.
- [470] Jean-Yves Girard. The Blind Spot. Lectures on Logic. European Mathematical Society, 2011.
- [471] Marianna Girlando, Sara Negri, and Nicola Olivetti. Uniform labelled calculi for preferential conditional logics based on neighbourhood semantics. *Journal of Logic and Computation*, 31(3):947–997, 04 2021.
- [472] Marianna Girlando, Sara Negri, and Giorgio Sbardolini. Uniform labelled calculi for conditional and counterfactual logics. In Rosalie Iemhoff, Michael Moortgat, and Ruy J. G. B. de Queiroz, editors, Logic, Language, Information, and Computation - 26th International Workshop, WoLLIC 2019, Utrecht, The Netherlands, July 2-5, 2019, Proceedings, volume 11541 of Lecture Notes in Computer Science, pages 248–263. Springer, 2019.
- [473] Thomas Glaß. Partielle Modelle von Theorien imprädikativer Mengenlehre. Master thesis, University of Münster, 1990.
- [474] Thomas Glaß, Michael Rathjen, and Andreas Schlüter. On the proof-theoretic strength of monotone induction in explicit mathematics. *Ann. Pure Appl. Logic*, 85:1–46, 1997.
- [475] Sarah Glaz. On the weak dimension of coherent group rings. Comm. Algebra, 15(9):1841–1858, 1987.
- [476] Sarah Glaz. On the weak dimension of coherent group rings. Comm. Algebra, 15(9):1841–1858, 1987.
- [477] Sarah Glaz. Regular symmetric algebras. J. Alqebra, 112(1):129–138, 1988.
- [478] Sarah Glaz. Commutative coherent rings, volume 1371 of Lecture Notes in Mathematics. Springer-Verlag, Berlin, 1989.
- [479] Sarah Glaz. On the coherence and weak dimension of the rings $R\langle x\rangle$ and R(x). Proc. Amer. Math. Soc., 106(3):579–587, 1989.

- [480] Sarah Glaz. Commutative coherent rings: historical perspective and current developments. *Nieuw Arch. Wisk.* (4), 10(1-2):37-56, 1992.
- [481] Sarah Glaz. Fixed rings of coherent regular rings. Comm. Algebra, 20(9):2635–2651, 1992.
- [482] Sarah Glaz. Finite conductor rings. Proc. Amer. Math. Soc., 129(10):2833–2843 (electronic), 2001.
- [483] Sarah Glaz. The weak dimensions of Gaussian rings. Proc. Amer. Math. Soc., 133(9):2507–2513 (electronic), 2005.
- [484] Sarah Glaz and Wolmer V. Vasconcelos. Flat ideals. II. Manuscripta Math., 22(4):325-341, 1977.
- [485] Sarah Glaz and Wolmer V. Vasconcelos. Flat ideals. III. Comm. Algebra, 12(1-2):199-227, 1984.
- [486] Valery Glivenko. Sur la logique de M. Brouwer. Acad. Roy. Belg. Bull. Cl. Sci. (5), 14:225–228, 1928.
- [487] Valery Glivenko. Sur quelques points de la Logique de M. Brouwer. Acad. Roy. Belg. Bull. Cl. Sci. (5), 15:183–188, 1929
- [488] Kurt Gödel. Die Vollständigkeit der Axiome des logischen Funktionenkalküls. Monatsh. Math. Phys., 37:349–360, 1930.
- [489] Kurt Gödel. Über formal unentscheidbare Stze der Principia Mathematica und verwandter Systeme I. Monatsh. Math. Phys., 38(1):173–198, 1931.
- [490] Kurt Gödel. Zur intuitionistischen Arithmetik und Zahlentheorie. Ergebnisse eines math. Kolloquiums, 4:39–40, 1933.
- [491] Kurt Gödel. Über eine bisher noch nicht benützte Erweiterung des finiten Standpunktes. Dialectica, 12:280–287, 1958.
- [492] Kurt Gödel. On a hitherto unexploited extension of the finitary standpoint. J. Philos. Logic, 9(2):133-142, 1980.
- [493] Kurt Gödel. Collected Works, Volume I: Publications 1929-1936. Oxford University Press, Oxford, 1986.
- [494] Kurt Gödel. Collected Works, Volume IV: Correspondence A-G. Oxford University Press, Oxford, 2003.
- [495] Kurt Gödel. Collected Works, Volume V: Correspondence H–Z. Oxford University Press, Oxford, 2003.
- [496] Robert Goldblatt. Semantic analysis of orthologic. Journal of Philosophical Logic, 3:19–35, 1974.
- [497] Oscar Goldman. Hilbert Rings and the Hilbert Nullstellensatz. Math. Z., 54(2):136–140, 1951.
- [498] Georges Gonthier. Formal Proof The Four-Color Theorem. Notices Amer. Math. Soc., 55:1382–1393, 2008.
- [499] Georges Gonthier, Andrea Asperti, Jeremy Avigad, Yves Bertot, Cyril Cohen, François Garillot, Stéphane Le Roux, Assia Mahboubi, Russell OConnor, Sidi Ould Biha, et al. A machine-checked proof of the odd order theorem. In International Conference on Interactive Theorem Proving, pages 163–179. Springer, 2013.
- [500] Laureano González-Vega, Henri Lombardi, Thomás Recio, and Marie-Françoise Roy. Spécialisation de la suite de sturm et sous-résultants. *I. RAIRO Informatique théoretique et Applications*, 6:561–588, 1990.
- [501] K.R. Goodearl. Von Neumann Regular Rings. Pitman Publishing Limited, London, 1979.
- [502] Rajeev Gore. Cut-Free Sequent And Tableau Systems For Propositional Normal Modal Logics. Phd thesis, University of Cambridge, 1992.
- [503] Frank Göring. Short proof of Menger's theorem. Discrete Math., 219:295–296, 2000.
- [504] Frank Göring. A proof of Menger's theorem by contraction. Discuss. Math. Graph Theory, 22:111–112, 2002.
- [505] John Goutsias and Henk J.A.M. Heijmans. Fundamenta Morphologicae Mathematicae. Fund. Inform, 41:1–31, 2000.
- [506] Daniel Gratzer, G. Alex Kavvos, Andreas Nuyts, and Lars Birkedal. Multimodal dependent type theory. *Logical Methods in Computer Science*, 17(3):Paper no. 11, 2021.
- [507] Heinrich Grell. Modulgruppen und -inversionen bei primären Integritätsbereichen. Math. Nachr., 4:392–407, 1951.
- [508] Edward R. Griffor and Michael Rathjen. The strength of some Martin-Löf type theories. Arch. Math. Logic, 33:347–385, 1994.
- [509] Alexander Grothendieck. Sur quelques points d'algèbre homologique. Tôhoku Math. J. (2), 9:119–221, 1957.
- [510] Alexander Grothendieck. Esquisse d'un programme. In Geometric Galois Actions, pages 243–283. Cambridge University Press, 1997.
- [511] Alexander Grothendieck and Jean Dieudonné. Éléments de géométrie algébrique. Vol. 1. Springer, Berlin, 1971.
- [512] Tibor Grünwald (later Gallai). Ein neuer Beweis eines Mengerschen Satzes. J. Lond. Math. Soc., 13:188–192, 1938.

- [513] Giulio Guerrieri and Alberto Naibo. Postponement of raa and Glivenko's theorem, revisited. *Studia Logica*, 107(1):109–144, 2019.
- [514] Håkon Robbestad Gylterud. From Multisets to Sets in Homotopy Type Theory, 2016.
- [515] Amina Hadj Kacem and Ihsen Yengui. Dynamical Gröbner bases over Dedekind rings. J. Algebra, 324(1):12–24, 2010.
- [516] Georg Hajós. Zum Mengerschen Graphensatz. Acta Sci. Math. (Szeged), 7:44-47, 1934-35.
- [517] Rudolf Halin. Über trennende Eckenmengen in Graphen und den Mengerschen satz. Math. Ann., 157:34–41, 1964.
- [518] Philip Hall. On representatives of subsets. J. London Math. Soc., 10(1):26-30, 1935.
- [519] Paul Halmos and Herbert E. Vaughan. The marriage problem. Amer. J. Math., 72:214-215, 1950.
- [520] G. Hamel. Eine Basis aller Zahlen und die unstetigen Lösungen der Funktionalgleichung f(x + y) = f(x) + f(y). Math. Ann., 60:459–462, 1905.
- [521] Joel David Hamkins. The modal logic of arithmetic potentialism and the universal algorithm. *Mathematics ArXiv*, pages 1–35, 2018. Under review.
- [522] Joel David Hamkins and Øystein Linnebo. The modal logic of set-theoretic potentialism and the potentialist maximality principles. The Review of Symbolic Logic, 15(1):135, 2022.
- [523] Joel David Hamkins and Kameryn J. Williams. The Σ₁-definable universal finite sequence. Journal of Symbolic Logic, pages 1–19, 2021.
- [524] Joel David Hamkins and W. Hugh Woodin. The universal finite set. arXiv: Logic, 2017.
- [525] Joel David Hamkins and Wojciech Aleksander Wooszyn. Modal model theory, 2020.
- [526] Bengt Hansson. Choice structures and preference relations. Synthese, 18(4):443-458, 1968.
- [527] Kostas Hatzikiriakou. Minimal prime ideals and arithmetic comprehension. J. Symbolic Logic, 56(1):67-70, 1991.
- [528] Felix Hausdorff. Grundzüge der Mengenlehre. Verlag von Veit & Comp., Leipzig, 1914.
- [529] Levon Haykazyan. More on a curious nucleus. J. Pure Appl. Algebra, 224:860-868, 2020.
- [530] Matthew Hendtlass and Peter Schuster. A direct proof of Wiener's theorem. In S. B. Cooper, A. Dawar, and B. Löwe, editors, How the World Computes. Turing Centenary Conference and Eighth Conference on Computability in Europe, volume 7318 of Lect. Notes Comput. Sci., pages 294–303, Berlin and Heidelberg, 2012. Springer. Proceedings, CiE 2012, Cambridge, UK, June 2012.
- [531] Leon Henkin. The completeness of the first-order functional calculus. J. Symb. Log., 14:159–166, 1949.
- [532] Horst Herrlich. Axiom of Choice, volume 1876 of Lecture Notes in Mathematics. Springer-Verlag, Berlin, 2006.
- [533] Daniel Herrmann. The patenting of mathematical methods at the epo. epi Information, (2|19):19-25, 2019.
- [534] P. Hertz. Uber Axiomensysteme für beliebige Satzsysteme. Math. Ann., 101:457–514, 1929.
- [535] P. Hertz. Über Axiomensysteme für beliebige Satzsysteme. Math. Ann., 101(1):457–514, 1929.
- [536] Paul Hertz. On axiomatic systems for arbitrary systems of sentences. In Jean-Yves Béziau, editor, *Universal Logic:* An Anthology. From Paul Hertz to Dov Gabbay, Studies in Universal Logic, pages 11–29. Birkhäuser, Basel. Transl. by J. Legris from [537].
- [537] Paul Hertz. Uber Axiomensysteme für beliebige Satzsysteme. Math. Ann., 87:246–269, 1922.
- [538] Paul Hertz. Über Axiomensysteme für beliebige Satzsysteme. Math. Ann., 87(3-4):246-269, 1922.
- [539] Paul Hertz. Über Axiomensysteme für beliebige Satzsysteme. I. Teil. Sätze ersten Grades. Math. Ann., 87(3):246–269, 1922.
- [540] Paul Hertz. Über Axiomensysteme für beliebige Satzsysteme. Math. Ann., 89:76–102, 1923.
- [541] Paul Hertz. Über Axiomensysteme für beliebige Satzsysteme. Math. Ann., 89(1-2):76-102, 1923.
- [542] Paul Hertz. Über Axiomensysteme für beliebige Satzsysteme. II. Teil. Sätze höheren Grades. Math. Ann., 89(1):76–102, 1923.
- [543] Paul Hertz. Uber Axiomensysteme für beliebige Satzsysteme. Math. Ann., 101(1):457–514, 1929.
- [544] Chris Heunen, Nicolaas P. Landsman, and Bas Spitters. A topos for algebraic quantum theory. *Comm. Math. Phys.*, 291(1):63–110, 2009.

- [545] David Hilbert. Über die Theorie der algebraischen Formen. Math. Ann., 36:473-534, 1890.
- [546] David Hilbert. Über das Unendliche. Math. Ann., 95(1):161-190, 1926.
- [547] David Hilbert. Die Grundlagen der Mathematik. Abhandlungen aus dem Seminar der Hamburgischen Universität, 6:65-85, 1928.
- [548] Ayana Hirata, Hajime Ishihara, Tatsuji Kawai, and Takako Nemoto. Equivalents of the finitary non-deterministic inductive definitions. *Ann. Pure Appl. Logic*, 170(10):1256–1272, 2019.
- [549] Melvin Hochster. Prime ideal structure in commutative rings. Trans. Amer. Math. Soc., 142:43-60, 1969.
- [550] Wilfried Hodges. Krull implies Zorn. J. Lond. Math. Soc., 19:285–287, 1979.
- [551] Bjarne Holen, Dag Hovland, and Martin Giese. Efficient rule-matching for hyper-tableaux. In K. Korovin, S. Schulz, and E. Ternovska, editors, IWIL 2012 (EPiC Series, vol. 22), pages 4–17, 2013.
- [552] August Holkott. Finite Konstruktion geordneter algebraischer Erweiterungen von geordneten Grundkörpern. PhD thesis, Hamburg, 1941.
- [553] Leon Horsten and Graham E. Leigh. Truth is simple. Mind, 126(501):195-232, 2017.
- [554] Paul Howard and Jean Rubin. Consequences of the Axiom of Choice. American Mathematical Society, Providence, RI, 1998.
- [555] Simon Huber and Peter Schuster. Maximalprinzipien und Induktionsbeweise. Technical report, University of Leeds, 2013.
- [556] Lloyd Humberstone. On a conservative extension argument of Dana Scott. Log. J. IGPL, 19:241–288, 2011.
- [557] Lloyd Humberstone. Dana Scott's work with generalized consequence relations. In Jean-Yves Béziau, editor, *Universal Logic: An Anthology. From Paul Hertz to Dov Gabbay*, Stud. Univers. Log., pages 263–279. Birkhäuser, Basel, 2012.
- [558] J. M. E. Hyland. First steps in synthetic domain theory. In A. Carbonia, M. Pedicchio, and G. Rosolini, editors, Proc. of the International Conference held in Como, Italy, 1990, volume 1488 of Lecture Notes in Math., pages 131–156. Springer, 1991.
- [559] Rosalie Iemhoff. Consequence relations and admissible rules. J. Philosophical Logic, 45(3):327–348, 2016.
- [560] Chris J. Isham. Topos methods in the foundations of physics. In Hans Halvorson, editor, *Deep Beauty: Understanding the Quantum World through Mathematical Innovation*, page 187206. Cambridge University Press, 2011.
- [561] Chris J. Isham and Jeremy Butterfield. Some possible roles for topos theory in quantum theory and quantum gravity. Foundations of Physics, 30(10):1707–1735, 2000.
- [562] Hajime Ishihara. A note on the Gödel–Gentzen translation. MLQ Math. Log. Q., 46(1):135–137, 2000.
- [563] Hajime Ishihara. A note on the Gödel-Gentzen translation. MLQ Math. Log. Q., 46(1):135-137, 2000.
- [564] Hajime Ishihara. Some conservative extension results on classical and intuitionistic sequent calculi. In U. Berger, H. Diener, P. Schuster, and M. Seisenberger, editors, Logic, Construction, Computation, volume 3 of Ontos Math. Log., pages 289–304. Ontos Verlag, Heusenstamm, 2012.
- [565] Hajime Ishihara. Classical propositional logic and decidability of variables in intuitionistic propositional logic. Log. Methods Comput. Sci., 10(3):3:1, 7, 2014.
- [566] Hajime Ishihara. Classical propositional logic and decidability of variables in intuitionistic propositional logic. Log. Methods Comput. Sci., 10(3):3:1, 7, 2014.
- [567] Hajime Ishihara and Takako Nemoto. Non-deterministic inductive definitions and fullness. In D. Probst and P. Schuster, editors, Concepts of Proof in Mathematics, Philosophy, and Computer Science, volume 6 of Ontos Mathematical Logic, pages 163–170. Walter de Gruyter, Berlin, 2016.
- [568] Hajime Ishihara and Takako Nemoto. A note on the independence of premiss rule. MLQ Math. Log. Q., 62(1-2):72-76, 2016.
- [569] Hajime Ishihara and Takako Nemoto. A note on the independence of premiss rule. Math. Log. Q., 62(1-2):72-76, 2016.
- [570] Hajime Ishihara and Helmut Schwichtenberg. Embedding classical in minimal implicational logic. MLQ Math. Log. Q., 62(1-2):94-101, 2016.
- [571] Nathan Jacobson. The radical and semi-simplicity for arbitrary rings. Amer. J. Math., 67(2):300–320, 1945.

- [572] Carl Jacobsson and Clas Löfwall. Standard bases for general coefficient rings and a new constructive proof of Hilbert's basis theorem. J. Symb. Comput., 12(3):337–372, 1991.
- [573] Paul Jaffard. Théorie de la Dimension dans les Anneaux de Polynomes. Mémor. Sci. Math., Fasc. 146. Gauthier-Villars, Paris, 1960.
- [574] Sándor Jenei and Franco Montagna. A proof of standard completeness for Esteva and Godo's logic MTL. *Studia Logica*, 70(2):183–192, 2002.
- [575] Tommy R. Jensen and Bjarne Toft. *Graph Coloring Problems*. Wiley Interscience Series in Discrete Mathematics and Optimization. John Wiley & Sons, Inc., New York, 1995. Online resources available (2011).
- [576] Zhengfeng Ji, Anand Natarajan, Thomas Vidick, John Wright, and Henry Yuen. MIP*=RE, 2020. arXiv:2001.04383v2.
- [577] Ingebrigt Johansson. Der Minimalkalkül, ein reduzierter intuitionistischer Formalismus. Compos. Math., 4:119–136, 1937.
- [578] P. T. Johnstone. Topos Theory. Academic Press [Harcourt Brace Jovanovich Publishers], London, 1977. London Mathematical Society Monographs, Vol. 10.
- [579] Peter Johnstone. Almost maximal ideals. Fund. Math., 123(3):197-209, 1984.
- [580] Peter T. Johnstone. Rings, fields, and spectra. J. Algebra, 49:238–260, 1977.
- [581] Peter T. Johnstone. Stone Spaces., volume 3 of Cambridge Studies in Advanced Mathematics. Cambridge University Press, 1982.
- [582] Peter T. Johnstone. The point of pointless topology. Bull. Amer. Math. Soc. (N.S.), 8(1):41–53, 1983.
- [583] Peter T. Johnstone. Sketches of an Elephant: A Topos Theory Compendium. Vol. 1, volume 43 of Oxford Logic Guides. The Clarendon Press Oxford University Press, New York, 2002.
- [584] Peter T. Johnstone. Sketches of an Elephant: A Topos Theory Compendium. Vol. 2, volume 44 of Oxford Logic Guides. The Clarendon Press Oxford University Press, Oxford, 2002.
- [585] André Joyal. Les théoremes de Chevalley-Tarski et remarques sur l'algèbre constructive. Cah. Topol. Géom. Différ. Catég., 16:256-258, 1976.
- [586] André Joyal. Lettre d'André Joyal à Alexandre Grothendieck, 1984. Ed. by Georges Maltsiniotis.
- [587] André Joyal and Tierney Myles. An extension of the Galois theory of Grothendieck. Number 309 in Memoirs of the American Mathematical Society. American Mathematical Society, Providence, Rhode Island, 1984.
- [588] Achim Jung, Mathias Kegelmann, and Andrew M. Moshier. Multi lingual sequent calculus and coherent spaces. Fundamenta Informaticae, 37(4):369–412, 1999.
- [589] Natthapong Jungteerapanich. A tableau system for the modal μ-calculus. In Martin Giese and Arild Waaler, editors, Automated Reasoning with Analytic Tableaux and Related Methods, 18th International Conference, TABLEAUX 2009, Oslo, Norway, July 6-10, 2009. Proceedings, volume 5607 of Lecture Notes in Computer Science, pages 220–234. Springer, 2009.
- [590] Irving Kaplansky. Commutative Rings. The University of Chicago Press, Chicago and London, 1974. Revised edition.
- [591] Irving Kaplansky. Set theory and metric spaces. Chelsea Publishing Co., New York, second edition, 1977.
- [592] Ambrus Kaposi, Simon Huber, and Christian Sattler. Gluing for Type Theory. In Herman Geuvers, editor, 4th International Conference on Formal Structures for Computation and Deduction, volume 131 of LIPIcs. Leibniz Int. Proc. Inform., pages 25:1–25:20. Schloss Dagstuhl. Leibniz-Zent. Inform., Wadern, 2019.
- [593] Nikita A. Karpenko and Alexander S. Merkurjev. Canonical p-dimension of algebraic groups. Adv. Math., 205(2):410–433, 2006.
- [594] Nikita A. Karpenko and Alexander S. Merwjev. Essential dimension of finite p-groups. Invent. Math., 172(3):491–508, 2008.
- [595] Michael Katz. Lukasiewicz logic and the foundation of measurement. Studia Logica, 40(3):209–225, 1981.
- [596] Tatsuji Kawai. Geometric theories of patch and Lawson topologies. Preprint, 2017.
- [597] Tatsuji Kawai. Presenting de Groot duality of stably compact spaces. Theoret. Comput. Sci, 823:44-68, 2020.
- [598] Tomoaki Kawano. Sequent calculi for orthologic with strict implication. Bulletin of the Section of Logic, page 17 pp., Nov. 2021.

- [599] Klaus Keimel. A unified theory of minimal prime ideals. Acta Math. Acad. Sci. Hungar., 23(1-2):51-69, 1972.
- [600] Gregor Kemper and Ihsen Yengui. Valuative dimension and monomial orders. J. Algebra, 557:278–288, 2020.
- [601] Andor Kertész. Einführung in die transfinite Algebra. Birkhäuser Verlag, Basel, 1975. Elemente der Mathematik vom höheren Standpunkt aus, Band VII.
- [602] David Kirby. Closure operations on ideals and submodules. J. London Math. Soc., 44:283–291, 1969.
- [603] Reinhardt Kleinknecht. Auswahlaxiom und causa prima. In Friedo Ricken, editor, Klassische Gottesbeweise in der Sicht der gegenwärtigen Logik und Wissenschaftstheorie, pages 111–123, Stuttgart, 1991. Kohlhammer.
- [604] A. Kock. Synthetic Differential Geometry. Number 333 in London Math Soc. Lecture Note Ser. Cambridge University Press, 2 edition, 2006.
- [605] Ulrich Kohlenbach. Effective moduli from ineffective uniqueness proofs. An unwinding of de La Vallée Poussin's proof for Chebycheff approximation. *Ann. Pure Appl. Logic*, 64:27–94, 1993.
- [606] Ulrich Kohlenbach. Effective moduli from ineffective uniqueness proofs. An unwinding of de La Vallée Poussin's proof for Chebycheff approximation. *Ann. Pure Appl. Logic*, 64:27–94, 1993.
- [607] Ulrich Kohlenbach. Applied Proof Theory: Proof Interpretations and their Use in Mathematics. Springer Monographs in Mathematics. Springer-Verlag Berlin Heidelberg, 2008.
- [608] Ulrich Kohlenbach and Jaime Gaspar. On Tao's "finitary" infinite pigeon hole principle. J. Symb. Logic, 75(1):355–371, 2010.
- [609] Ulrich Kohlenbach and Paulo Oliva. Proof Mining: a systematic way of analysing proofs in mathematics. *Proc. Steklov Inst. Math.*, 242:136–164, 2003.
- [610] Dènes Kőnig. Über trennende Knotenpunkte in Graphen (nebst Anwendungen auf Determinanten und Matrizen). Acta Sci. Math. (Szeged), 6(2-3):155–179, 1932-34.
- [611] Henryk Kotlarski, Stanislav Krajewski, and Alistair H. Lachlan. Construction of satisfaction classes for nonstandard models. Canadian Mathematical Bulletin, 24:283–93, 1981.
- [612] Marcus Kracht. On extensions of intermediate logics by strong negation. *Journal of Philosophical Logic*, 27(1), Feb 1998.
- [613] G. Kreisel. Mathematical significance of consistency proofs. J. Symb. Logic, 23:155–182, 1958.
- [614] Georg Kreisel. Hilbert's programme. Dialectica, 12:346–372, 1958. Revised, with postscript, in [109], pp. 289–238.
- [615] A. Kreuzer and U. Kohlenbach. Term extraction and Ramsey's theorem for pairs. J. Symb. Logic, 77(3):853–895, 2012.
- [616] Saul Kripke. Outline of a theory of truth. Journal of Philosophy, 72:690-716, 1975.
- [617] Saul A. Kripke. Semantical analysis of modal logic. I. Normal modal propositional calculi. Z. Math. Logik Grundlagen Math., 9:67–96, 1963.
- [618] Martin Krombholz. Proof Theory of Graph Minors and Tree Embeddings. Phd thesis, University of Leeds, 2018.
- [619] Martin Krombholz and Michael Rathjen. Upper bounds on the graph minor theorem. In A. Weiermann P. Schuster, M. Seisenberger, editor, Well-Quasi Orders in Computation, Logic, Language and Reasoning, volume 51 of Trends in Logic. Springer. Forthcoming.
- [620] Wolfgang Krull. Idealtheorie in Ringen ohne Endlichkeitsbedingung. Math. Ann., 101:729–744, 1929.
- [621] Wolfgang Krull. Idealtheorie in Ringen ohne Endlichkeitsbedingung. Math. Ann., 101(1):729–744, 1929.
- [622] Wolfgang Krull. Idealtheorie. Ergebnisse der Mathematik und ihrer Grenzgebiete, vol. 4, no. 3. Springer, Berlin, 1935.
- [623] Wolfgang Krull. Jacobsonsche Ringe, Hilbertscher Nullstellensatz, Dimensionstheorie. Math. Z., 54(4):354–387, 1951.
- [624] Joseph B. Kruskal. Well-quasi ordering, the tree theorem, and Vazsonyi's conjecture. Trans. Amer. Math. Soc., 95:210–225, 1960.
- [625] Franz-Viktor Kuhlmann, Henri Lombardi, and Hervé Perdry. Dynamic computations inside the algebraic closure of a valued field. In S. Kuhlmann F.-V. Kuhlmann and M. Marshall, editors, *Valuation Theory and its Applications. Vol 2*, volume 33 of *Fields Institute Communications*, pages 133–156, 2003.
- [626] Ernst Kunz. Introduction to Commutative Algebra and Algebraic Geometry. Birkhäuser, Boston, Basel, Berlin, 1985.
- [627] Ernst Kunz. Algebra. Vieweg, Braunschweig, 1991.

- [628] Casimir Kuratowski. Une méthode d'élimination des nombres transfinis des raisonnements mathématiques. Fundamenta Math., 3:76–108, 1922.
- [629] Jean Pierre Lafon. Les formalismes fondamentaux de l'algèbre commutative, volume 20 of Collection Enseignement des Sciences. Hermann, Paris, 1974.
- [630] Jean Pierre Lafon. Algèbre commutative. Languages géométrique et algébrique, volume 24 of Collection Enseignement des Sciences. Hermann, Paris, 1977.
- [631] Harbans Lal. A remark on rings with primary ideals as maximal ideals. Math. Scand., 29:72, 1971.
- [632] Tsit-Yuen Lam. A First Course in Noncommutative Rings, volume 131 of Graduate Texts in Mathematics. Springer-Verlag, New York, 1991.
- [633] Tsit-Yuen Lam. Lectures on Modules and Rings, volume 189 of Graduate Texts in Mathematics. Springer-Verlag, New York, 1999.
- [634] Edmund Landau. Grundlagen der Analysis. Chelsea, New York, 1960.
- [635] Klaas Landsman. Topos theory and quantum logic, pages 459-494. Springer International Publishing, Cham, 2017.
- [636] Serge Lang. Algebra. Addison-Wesley, Reading, MA, 1993. 3rd ed.
- [637] Jimmie D. Lawson. Review of: Gierz, gerhard and keimel, klaus, 'a lemma on primes appearing in algebra and analysis', houston j. math. 3 (1977) 207–224. *Math. Rev.*, 1979. MR0460198.
- [638] F. William Lawvere. Quantifiers and sheaves. In Actes du Congrès International des Mathématiciens (Nice, 1970), Tome 1, pages 329–334. Gauthier-Villars, Paris, 1971.
- [639] F. William Lawvere. Everyday physics of extended bodies or why functionals need analyzing. Categ. Gen. Algebr. Struct. Appl., 6(1):9–19, 2017.
- [640] Solomon Lefschetz. Algebraic Topology, volume 27 of Colloquium Publications. American Mathematical Society, 1942.
- [641] Javier Legris. Paul Hertz and the origins of structural reasoning. In Jean-Yves Béziau, editor, *Universal Logic: An Anthology. From Paul Hertz to Dov Gabbay*, Studies in Universal Logic, pages 3–10. Birkhäuser, Basel.
- [642] Graham E. Leigh. Conservativity for theories of compositional truth via cut elimination. Technical report, University of Oxford, 2013.
- [643] Graham E. Leigh. Conservativity for theories of compositional truth via cut elimination. CoRR, abs/1308.0168, 2013.
- [644] Graham E. Leigh. A proof-theoretic account of classical principles of truth. Ann. Pure Appl. Logic, 164:1009–1024, 2013.
- [645] Graham E. Leigh. Conservativity for theories of compositional truth via cut elimination. Journal of Symbolic Logic, 80(3):845–865, 2015.
- [646] Graham E. Leigh. Reflecting on truth. If CoLoG Journal of Logics and their Applications, 3(4):557–593, 2016.
- [647] Graham E. Leigh and Michael Rathjen. An ordinal analysis for theories of self-referential truth. Archive for Mathematical Logic, 49:213–247, 2010.
- [648] Graham E. Leigh and Michael Rathjen. The Friedman-Sheard programme in intuitionistic logic. J. Symb. Log., 77:777-806, 2012.
- [649] Vladimir Lifschitz. Semantical completeness theorems in logic and algebra. Proc. Amer. Math. Soc., 79:89–96, 1980.
- [650] Per Lindström. Provability logic a short introduction. Theoria, 62(1-2):19-61, 1996.
- [651] Øystein Linnebo and Stewart Shapiro. Actual and potential infinity. Noûs, 53(1):160–191, 2019.
- [652] Øystein Linnebo and Stewart Shapiro. Potentiality and indeterminacy in mathematics. *Journal of Applied Logics:* The IfCoLog Journal of Logics and their Applications, 6(7):1201–1222, 2020.
- [653] Tadeusz Litak, Miriam Polzer, and Ulrich Rabenstein. Negative translations and normal modality. In 2nd International Conference on Formal Structures for Computation and Deduction, volume 84 of LIPIcs. Leibniz Int. Proc. Inform., pages Art. No. 27, 18. Schloss Dagstuhl. Leibniz-Zent. Inform., Wadern, 2017.
- [654] Henri Lombardi. Une borne sur les degrés pour le théorème des zéros réel effectif. In Roy M.-F. Coste M., Mahé L., editor, Real Algebraic Geometry, volume 1542 of Kongreßberichte, Rennes, Lecture Notes in Mathematics, pages 323–345. Springer, 1991.
- [655] Henri Lombardi. Le contenu constructif d'un principe local-global avec une application à la structure d'un module projectif de type fini. Publications Mathématiques de Besançon. Algèbre et Théorie des Nombres, 1997. Fascicule 94–95 & 95–96.

- [656] Henri Lombardi. Relecture constructive de la théorie d'Artin-Schreier. Ann. Pure Appl. Logic, 91:59-92, 1998.
- [657] Henri Lombardi. Dimension de Krull, Nullstellensätze et évaluation dynamique. Math. Zeitschrift, 242:23-46, 2002.
- [658] Henri Lombardi. Hidden constructions in abstract algebra. I. Integral dependance. J. Pure Appl. Algebra, 167:259–267, 2002
- [659] Henri Lombardi. Algèbre dynamique, espaces topologiques sans points et programme de Hilbert. Ann. Pure Appl. Logic, 137:256–290, 2006.
- [660] Henri Lombardi and Hervé Perdry. The Buchberger algorithm as a tool for ideal theory of polynomial rings in constructive mathematics. In B. Buchberger and F. Winkler, editors, Gröbner Bases and Applications, volume 251 of London Math. Soc. Lecture Notes Ser., pages 393–407, 1998.
- [661] Henri Lombardi and Claude Quitté. Constructions cachées en algèbre abstraite (2). Le principe local global. In M. Fontana et al., editor, Commutative Ring Theory and Applications, volume 231 of Lecture Notes in Pure and Applied Mathematics, pages 461–476, 2002.
- [662] Henri Lombardi and Claude Quitté. Seminormal rings (following Thierry Coquand). Theoret. Comput. Sci., 392:113–127, 2008.
- [663] Henri Lombardi and Claude Quitté. Algèbre commutative. Méthodes constructives. Modules projectifs de type fini. Calvage & Mounet, Paris, 2012.
- [664] Henri Lombardi and Claude Quitté. Commutative Algebra: Constructive Methods. Finite Projective Modules, volume 20 of Algebra and Applications. Springer Netherlands, Dordrecht, 2015.
- [665] Henri Lombardi, Claude Quitté, and Ihsen Yengui. Hidden constructions in abstract algebra (6) the theorem of Maroscia, Brewer and Costa., 2006.
- [666] Henri Lombardi and Marie-Françoise Roy. Constructive elementary theory of ordered fields. In Traverso C. Mora T., editor, Effective Methods in Algebraic Geometry, volume 94 of Progress in Math. (Kongreßberichte MEGA 90 Castiglioncello, Italien), pages 249–262. Birkhäuser, 1991.
- [667] Henri Lombardi and Ihsen Yengui. Suslin's algorithms for reduction of unimodular rows. J. Symb. Comput., 39:707–717, 2005.
- [668] Falko Lorenz. Einführung in die Algebra. Teil II. Bibliographisches Institut, Mannheim, 1990.
- [669] Paul Lorenzen. Über halbgeordnete Gruppen. Math. Z., 52(1):483–526, 1950.
- [670] Paul Lorenzen. Algebraische und logistische Untersuchungen über freie Verbände. J. Symb. Logic, 16(2):81–106, 1951.
- [671] Paul Lorenzen. Teilbarkeitstheorie in Bereichen. Math. Z., 55(3):269–275, 1952.
- [672] Paul Lorenzen. Die Erweiterung halbgeordneter Gruppen zu Verbandsgruppen. Math. Z., 58(1):15-24, 1953.
- [673] Paul Lorenzen. Eine Bemerkung über die Abzählbarkeitsvoraussetzung in der Algebra. Math. Zeitschr., 57:241–243, 1953.
- [674] Paul Lorenzen. Einführung in die operative Logik und Mathematik, volume 78 of Grundlehren Math. Wiss. Springer, 1955.
- [675] Paul Lorenzen. Algebraic and logistic investigations on free lattices, 2017. Transl. by Stefan Neuwirth of [670].
- [676] László Lovász. A remark on Menger's theorem. Acta Math. Acad. Sci. Hungar., 21(3-4):365-368, 1970.
- [677] Robert S. Lubarsky and Michael Rathjen. On the constructive dedekind reals. Logic & Analysis, 1:131–152, 2008.
- [678] R. Duncan Luce. Semiorders and a theory of utility discrimination. Econometrica, 24(2):178–191, 1956.
- [679] Zhaohui Luo. ECC, an Extended Calculus of Constructions. In LICS, pages 386–395, 1989.
- [680] Jacob Lurie. Higher Topos Theory. Annals of Mathematics Studies. Number 170. Princeton University Press, Princeton, 2009.
- [681] Saunders Mac Lane. Categories for the working mathematician. Graduate Texts in Mathematics, Vol. 5. Springer-Verlag, New York-Berlin, 1971.
- [682] Saunders Mac Lane and Ieke Moerdijk. Sheaves in Geometry and Logic. A First Introduction to Topos Theory. Universitext. Springer-Verlag, New York, 1994.
- [683] Angus Macintyre. The Impact of Gödel's Incompleteness Theorems on Mathematics. In Matthias Baaz, Christos H. Papadimitriou, Hilary W. Putnam, Dana S. Scott, and Charles L. Harper, Jr., editors, Kurt Gödel and the Foundations of Mathematics: Horizons of Truth, pages 3–26. Cambridge University Press, Cambridge, 2011.

- [684] Angus Macintyre and Harold Simmons. Gödel's diagonalization technique and related properties of theories. Colloq. Math., 28:165–180, 1973.
- [685] Paolo Maffezioli, Alberto Naibo, and Sara Negri. The Church–Fitch knowability paradox in the light of structural proof theory. *Synthese*, 190(14):2677–2716, 2013.
- [686] Assia Mahboubi, Enrico Tassi, Yves Bertot, and George Gonthier. Mathematical Components. 2018.
- [687] Maria Emilia Maietti. A minimalist two-level foundation for constructive mathematics. Ann. Pure Appl. Logic, 160(3):319–354, 2009.
- [688] Maria Emilia Maietti, Fabio Pasquali, and Giuseppe Rosolini. Triposes, exact completions, and Hilbert's ϵ -operator. Tbilisi Math. J., 10(3):141–166, December 2017.
- [689] Maria Emilia Maietti and Giovanni Sambin. Toward a minimalist foundation for constructive mathematics. In L. Crosilla and P. Schuster, editors, From Sets and Types to Topology and Analysis, volume 48 of Oxford Logic Guides, pages 91–114. Oxford University Press, 2005.
- [690] M.E. Maietti and G. Rosolini. Quotient completion for the foundation of constructive mathematics. Logica Universalis, 2012. to appear.
- [691] Klaus Mainzer. From Mathesis Universalis to Provability, Computability, and Constructivity. In S. Centrone, S. Negri, D. Sarikaya, and P. Schuster, editors, *Mathesis Universalis, Computability and Proof*, volume 412 of *Synthese Library*, pages 203–234. Springer, Cham, 2019.
- [692] Klaus Mainzer, Peter Schuster, and Helmut Schwichtenberg, editors. *Proof and Computation II. From Proof Theory and Univalent Mathematics to Program Extraction and Verification*. World Scientific, Singapore, 2021.
- [693] Grzegorz Malinowski. Many-valued logics, volume 25 of Oxford Logic Guides. The Clarendon Press, Oxford University Press, New York, 1993. Oxford Science Publications.
- [694] Grzegorz Malinowski. Many-valued logic and its philosophy. In Dov M. Gabbay and J. Woods, editors, The Many Valued and Nonmonotonic Turn in Logic, volume 8 of Handbook of the History of Logic, pages 13–94. North-Holland, Amsterdam, 2007.
- [695] Bassel Mannaa and Thierry Coquand. Dynamic Newton-Puiseux theorem. J. Log. Anal., 5, 2013.
- [696] Bassel Mannaa and Thierry Coquand. Dynamic Newton-Puiseux theorem. J. Log. Anal., 5:22, 2013. Id/No 5.
- [697] Bassel Mannaa and Thierry Coquand. A sheaf model of the algebraic closure. In Paulo Oliva, editor, Classical Logic and Computation 2014. EPTCS 164, pages 18–32, 2014.
- [698] Vesna Marinkovi. Proof simplification in the framework of coherent logic. Comput. Inform., 34(2), 2015.
- [699] Norman M. Martin and Stephen Pollard. Closure Spaces and Logic. Kluwer Academic Publishers, Dordrecht, 1996.
- [700] Per Martin-Löf. An intuitionistic theory of types: Predicative part. In H. E. Rose and J. Sheperdson, editors, *Studies in Logic and the Foundations of Mathematics*, volume 80, pages 73–118. Elsevier, 1975.
- [701] Per Martin-Löf. Intuitionistic Type Theory, volume 1 of Studies in Proof Theory. Lecture Notes. Bibliopolis, Naples, 1984. Notes by Giovanni Sambin.
- [702] Per Martin-Löf. The Hilbert-Brouwer controversy resolved? In *One Hundred Years of Intuitionism (19072007)*, pages 209–219. Birkhäuser Basel, 2008.
- [703] Per Martin-Löf. 100 years of Zermelo's axiom of choice: what was the problem with it? In *Logicism*, intuitionism, and formalism, volume 341 of Synth. Libr., pages 209–219. Springer, Dordrecht, 2009.
- [704] Simone Martini, Andrea Masini, and Margherita Zorzi. From 2-sequents and linear nested sequents to natural deduction for normal modal logics. *ACM Trans. Comput. Log.*, 22(3):19:1–19:29, 2021.
- [705] Andrea Masini, Luca Viganò, and Margherita Zorzi. Modal deduction systems for quantum state transformations. J. Multiple Valued Log. Soft Comput., 17(5-6):475–519, 2011.
- [706] Andrea Masini and Margherita Zorzi. A logic for quantum register measurements. Axioms, 8(1):25, 2019.
- [707] Yuri Vladimirovitch Matiyasevich. The application of the methods of the theory of logical derivation to graph theory. Math. Notes Acad. Sci. USSR, 12(6):904–908, 1972.
- [708] Yuri Vladimirovitch Matiyasevich. Metamathematical approach to proving theorems of discrete mathematics. J. Soviet Math., 10:517–533, 1978.
- [709] Hideyuki Matsumura. Commutative Ring Theory, volume 8 of Cambridge Stud. Adv. Math. Cambridge University Press, 1987.

- [710] Stephen McAdam and Richard G. Swan. Factorizations of monic polynomials. In Alberto Facchini, Evan Houston, and Luigi Salce, editors, *Rings, Modules, Algebras, and Abelian Groups*, volume 236 of *Lecture Notes in Pure and Applied Mathematics*. Marcel Dekker, Inc., 2004.
- [711] John McCabe. A note on Zariski's lemma. Amer. Math. Monthly, 83(7):560-561, 1976.
- [712] E. J. McCluskey. Minimization of Boolean functions. Bell System Technical Journal, 35(6):1417–1444, 1956.
- [713] Neal H. McCoy. Subrings of infinite direct sums. Duke Math. J., 4(3):486-494, 1938.
- [714] William McCuaig. A simple proof of Menger's theorem. J. Graph Theory, 8:427–429, 1984.
- [715] Vann McGee. Maximal consistent sets of instances of Tarski's schema (T). Journal of Philosophical Logic, 21:235–241, 1992.
- [716] Maarten McKubre-Jordens. Material implications over minimal logic (joint work with Hannes Diener). Conference presentation, May 2016. Mathematics for Computation, Benediktinerabtei Niederaltaich, Germany, 8–13 May 2016.
- [717] Colin McLarty. What does it take to prove Fermat's last theorem? Grothendieck and the logic of number theory. Bull. Symbolic Logic, 16(3):359–377, 2010.
- [718] Toby Meadows. Infinitary tableaux for semantic truth. Review of Symbolic Logic, 8:207–235, 2015.
- [719] Andrea Meinander. A solution of the uniform word problem for ortholattices. *Mathematical Structures in Computer Science*, 20(4):625638, 2010.
- [720] Karl Menger. Zur allgemeinen Kurventheorie. Fund. Math., 10(1):96–115, 1927.
- [721] Karl Menger. Kurventheorie. Teubner, Leipzig, 1932. Hrsg. unter Mitarb. von Georg Nöbeling.
- [722] A.S. Merkurjev. On the norm residue symbol of degree 2. Dokl. Akad. Nauk SSSR, 261:542–547, 1981. In Russian; English translation: Soviet Math. Dokl. 24 (1981), no. 3, 546–551 (1982).
- [723] George Metcalfe, Nicola Olivetti, and Dov Gabbay. Sequent and hypersequent calculi for abelian and Łukasiewicz logics. ACM Trans. Comput. Log., 6(3):578–613, 2005.
- [724] George Metcalfe, Nicola Olivetti, and Dov Gabbay. Proof Theory for Fuzzy Logics, volume 36 of Applied Logic Series. Springer, New York, 2009.
- [725] Ray Mines, Fred Richman, and Wim Ruitenburg. A Course in Constructive Algebra. Springer, New York, 1988. Universitext.
- [726] Jack Minker. Overview of disjunctive logic programming. Ann. Math. Artif. Intell., 12(1-2):1-24, 1994.
- [727] Grigori Mints. Classical and intuitionistic geometric logic, 2012. Talk at Conference on *Philosophy, Mathematics*, Linguistics: Aspects of Interaction 2012.
- [728] Yutaka Miyazaki. Kripke-style semantics of orthomodular logics. Mathematical Logic Quarterly, 47(3):341–362, 2001.
- [729] Abdessalem Mnif and Ihsen Yengui. An algorithm for unimodular completion over Noetherian rings. *J. Algebra*, 316(2):483–498, 2007.
- [730] Antonio Monteiro. Généralisation d'un théorème de R. Sikorski sur les algèbres de Boole. *Bulletin des Sciences Mathématiques*, 89:65–74, 1965.
- [731] Gregory H. Moore. Zermelo's Axiom of Choice: Its Origins, Development, & Influence. Dover Publications, Mineola, New York, 2013. Unabridged republication of the work originally published as Volume 8 in the series "Studies in the History of Mathematics and Physical Sciences" by Springer-Verlag, New York, in 1982.
- [732] Marianne Morillon. Divers axiomes de choix. In Séminaire d'analyse 1985–1986 (Clermont-Ferrand, 1985–1986), pages Exp. No. 4 and 5, 22. Université Clermont-Ferrand II, Clermont, 1986.
- [733] Marianne Morillon. *Topologie, analyse nonstandart et axiome du choix*. Thèse de doctorat en sciences et techniques communes, Université Blaise Pascal Clermont-Ferrand 2, 1988.
- [734] Yiannis Moschovakis. Notes on Set Teory. Undergraduate Texts in Mathematics. Springer, New York, second edition, 2006.
- [735] M. Andrew Moshier and Achim Jung. A logic for probabilities in semantics. In Computer Science Logic, 16th International Workshop, CSL 2002, 11th Annual Conference of the EACSL, Edinburgh, Scotland, UK, September 22-25, 2002, Proceedings, pages 216-231, 2002.
- [736] Christopher J. Mulvey and Joan Wick-Pelletier. The dual locale of a seminormed space. Cah. Topol. Géom. Différ. Catég., 23(1):73–92, 1982.

- [737] Christopher J. Mulvey and Joan Wick-Pelletier. A globalization of the Hahn-Banach theorem. Adv. Math., 89:1–59, 1991.
- [738] Daniele Mundici. The logic of Ulam's game with lies. Knowledge, belief and strategic interaction, pages 275–284, 1992.
- [739] Daniele Mundici. Advanced Łukasiewicz calculus and MV-algebras, volume 35 of Trends in Logic—Studia Logica Library. Springer, Dordrecht, 2011.
- [740] Daniele Mundici. The differential semantics of Łukasiewicz syntactic consequence. In *Petr Hájek on mathematical fuzzy logic*, pages 143–157. Springer, 2015.
- [741] John Myhill. Constructive set theory. J. Symb. Logic, 40(3):347–382, 1975.
- [742] Ernest Nagel and James R. Newman. *Gödel's Proof.* New York University Press, New York and London, revised edition, 2001.
- [743] Crispin St. John Alvah Nash-Williams and William Thomas Tutte. More proofs of Menger's theorem. J. Graph Theory, 1:13–17, 1977.
- [744] Sara Negri. Stone bases alias the constructive content of Stone representation. In Aldo Ursini and Paolo Aglianò, editors, Logic and algebra. Proceedings of the international conference dedicated to the memory of Roberto Magari, April 26–30, 1994, Pontignano, Italy, volume 180 of Lecture Notes in Pure and Applied Mathematics, pages 617–636. Marcel Dekker, New York, 1996.
- [745] Sara Negri. A sequent calculus for constructive ordered fields. In P. Schuster, U. Berger, and H. Osswald, editors, Reuniting the antipodes—constructive and nonstandard views of the continuum (Venice, 1999), volume 306 of Synthese Library, pages 143–155. Kluwer, Dordrecht, 2001.
- [746] Sara Negri. Continuous domains as formal spaces. Math. Structures Comput. Sci., 12(1):19-52, 2002.
- [747] Sara Negri. Contraction-free sequent calculi for geometric theories with an application to Barr's theorem. Arch. Math. Logic, 42(4):389–401, 2003.
- [748] Sara Negri. Permutability of rules for linear lattices. J.UCS, 11(12):1986–1995, 2005. Special Issue "Constructivity, Computability, and Logic".
- [749] Sara Negri. Proof analysis in modal logic. J. Philos. Log., 34(5–6):507–544, 2005.
- [750] Sara Negri. Kripke completeness revisited. In Giuseppe Primiero, editor, Acts of Knowledge: History, Philosophy and Logic, pages 233–266. College Publications, 2009.
- [751] Sara Negri. Proof analysis beyond geometric theories: from rule systems to systems of rules. *J. Logic Comput.*, 26(2):513–537, 2014.
- [752] Sara Negri. Proofs and countermodels in non-classical logics. Log. Univers., 8(1):25-60, 2014.
- [753] Sara Negri. Glivenko sequent classes in the light of structural proof theory. Arch. Math. Logic, 55(3-4):461-473, 2016.
- [754] Sara Negri. Glivenko sequent classes in the light of structural proof theory. Archive for Mathematical Logic, 55(3-4):461-473, 2016.
- [755] Sara Negri. The intensional side of algebraic-topological representation theorems. Synthese, pages 1–23, 2017.
- [756] Sara Negri. Proof theory for non-normal modal logics: The neighbourhood formalism and basic results. FLAP, 4(4), 2017.
- [757] Sara Negri. Geometric rules in infinitary logic. In Arnon Avron on Semantics and Proof Theory of Non-Classical Logics, Outstanding Contributions to Logic, pages 265–293. Springer, Cham, 2021.
- [758] Sara Negri and Roy Dyckhoff. Decision methods for linearly ordered heyting algebras. Archive for Mathematical Logic, 45(4):411–422, 2006.
- [759] Sara Negri and Eugenio Orlandelli. Proof theory for quantified monotone modal logics. Logic Journal of the IGPL, 27(4):478–506, 2019.
- [760] Sara Negri and Giorgio Sbardolini. Proof analysis for Lewis counterfactuals. Review of Symbolic Logic, 9(1):44–75, 2016.
- [761] Sara Negri and Silvio Valentini. Tychonoff's theorem in the framework of formal topologies. *J. Symbolic Logic*, 62(4):1315–1332, 1997.
- [762] Sara Negri and Jan von Plato. From mathematical axioms to mathematical rules of proof: recent developments in proof analysis. *Philos. Trans. R. Soc. Lond. Ser.A.* In press.

- [763] Sara Negri and Jan von Plato. Cut elimination in the presence of axioms. Bull. Symb. Log., 4(4):418-435, 1998.
- [764] Sara Negri and Jan von Plato. Cut elimination in the presence of axioms. Bull. Symb. Log., 4(4):418-435, 1998.
- [765] Sara Negri and Jan von Plato. Structural Proof Theory. Cambridge University Press, Cambridge, 2001.
- [766] Sara Negri and Jan von Plato. Permutability of rules in lattice theory. Algebra Universalis, 48(4):473–477, 2002.
- [767] Sara Negri and Jan von Plato. Proof systems for lattice theory. Math. Structures Comput. Sci., 14(4):507–526, 2004.
- [768] Sara Negri and Jan von Plato. Proof Analysis. A Contribution to Hilbert's Last Problem. Cambridge University Press, Cambridge, 2011.
- [769] Sara Negri and Jan von Plato. Cut elimination in sequent calculi with implicit contraction, with a conjecture on the origin of Gentzen's altitude line construction. In D. Probst and P. Schuster, editors, Concepts of Proof in Mathematics, Philosophy, and Computer Science, volume 6 of Ontos Mathematical Logic, pages 269–290. Walter de Gruyter, Berlin, 2016.
- [770] Sara Negri, Jan von Plato, and Thierry Coquand. Proof-theoretical analysis of order relations. Arch. Math. Logic, 43:297–309, 2004.
- [771] Stefan Neuwirth. Lorenzen's reshaping of Krull's Fundamentalsatz for integral domains (1938–1953). In Gerhard Heinzmann and Gereon Wolters, editors, *Paul Lorenzen: Mathematician and Logician*. Springer. Forthcoming.
- [772] Satoru Niki and Peter Schuster. On Scotts semantics for many-valued logic. J. Logic Comput., 30:1291–1302, 2020. exaa036.
- [773] Hirokazu Nishimura. Proof theory for minimal quantum logic I. International Journal of Theoretical Physics, 33:103–113, 1994.
- [774] Emmy Noether. Idealtheorie in Ringbereichen. Math. Ann., 83:24–66, 1921.
- [775] Bengt Nordström, Kent Petersson, and Jan M Smith. *Programming in Martin-Löfs type theory*, volume 200. Oxford University Press, Oxford, 1990.
- [776] Douglas G. Northcott. *Ideal Theory*. Cambridge University Press, 1953.
- [777] Douglas G. Northcott. An Introduction to Homological Algebra. Cambridge University Press, New York, 1960.
- [778] OECD. Human resources in higher education. In Resourcing Higher Education. Challenges, Choices and Consequences. 2020.
- [779] Encyclopedia of Mathematics. Intermediate logic. Last modified on 13 November 2016, at 20:12.
- [780] Nicola Olivetti. Tableaux for Łukasiewicz infinite-valued logic. Studia Logica, 73(1):81–111, 2003.
- [781] Hiroakira Ono. Glivenko theorems revisited. Ann. Pure Appl. Logic, 161(2):246–250, 2009.
- [782] V.P. Orevkov. Glivenko's sequence classes. In V.P. Orevkov, editor, Logical and logico-mathematical calculi. Part 1, pages 131–154. Leningrad, 1968.
- [783] Eugenio Orlandelli and Giovanna Corsi. Corso di logica modale proposizionale, volume 1169 of Studi Superiori. Carrocci editore, 2019.
- [784] Erik Palmgren. Transfinite hierarchies of universes. Technical report, Uppsala University, 1991. Department of Mathematics Report 1991:7.
- [785] Erik Palmgren. An information system interpretation of Martin-Löf's partial type theory with universes. *Inform. and Comput.*, 106:26–60, 1993.
- [786] Erik Palmgren. Constructive sheaf semantics. Math. Logic Quart., 43(3):321–327, 1997.
- [787] Erik Palmgren. On universes in type theory. In G. Sambin and J.M. Smith, editors, Twenty-Five Years of Constructive Type Theory (Venice, 1995), volume 36 of Oxford Logic Guides. Oxford University Press, New York, 1998.
- [788] Erik Palmgren. An intuitionistic axiomatisation of real closed fields. MLQ Math. Log. Q., 48(2):297–299, 2002.
- [789] Erik Palmgren. From intuitionistic to point-free topology: On the foundation of homotopy theory. In Sten Lindström, Erik Palmgren, Krister Segerberg, and Viggo Stoltenberg-Hansen, editors, *Logicism, Intuitionism, and Formalism:* What has Become of Them?, pages 237–253. Springer Netherlands, Dordrecht, 2009.
- [790] Robert Paré and Michael Makkai. Accessible categories: The Foundations of Categorical Model Theory. Number 104 in Contemporary Mathematics. American Mathematical Society, Providence, Rhode Island, 1989.
- [791] Gillman Payette and Peter K. Schotch. On preserving. Log. Univers., (2):295–310, 2007.

- [792] Gillman Payette and Peter K. Schotch. On preserving. Log. Univers., 1:295-310, 2007.
- [793] Gillman Payette and Peter K. Schotch. On preserving. Log. Univers., 1(2):295–310, 2007.
- [794] Gillman Payette and Peter K. Schotch. Remarks on the Scott–Lindenbaum Theorem. Studia Logica, 102(5):1003–1020, 2014
- [795] Gillman Payette and Peter K. Schotch. Remarks on the Scott-Lindenbaum Theorem. Studia Logica, 102:1003-1020, 2014.
- [796] Gillman Payette and Peter K. Schotch. Remarks on the Scott-Lindenbaum Theorem. Studia Logica, 102(5):1003-1020, 2014.
- [797] Álvaro Pelayo, Vladimir Voevodsky, and Michael A. Warren. A univalent formalization of the p-adic numbers. Math. Structures Comput. Sci, 25:1147–1171, 2015.
- [798] Hervé Perdry. Strongly Noetherian rings and constructive ideal theory. J. Symb. Comput., 37(4):511–535, 2004.
- [799] Hervé Perdry. Lazy bases: a minimalist constructive theory of Noetherian rings. Math. Log. Quart., 54(1):70–82, 2008.
- [800] Hervé Perdry and Peter Schuster. Noetherian orders. Math. Structures Comput. Sci., 21:111–124, 2011.
- [801] Hervé Perdry and Peter Schuster. Constructing Gröbner bases for Noetherian rings. *Math. Structures Comput. Sci.*, 24:e240206, 2014.
- [802] Luiz Carlos Pereira and Edward Hermann Haeusler. On constructive fragments of classical logic. In Dag Prawitz on proofs and meaning, volume 7 of Outst. Contrib. Log., pages 281–292. Springer, Cham, 2015.
- [803] Hazel Perfect. Applications of Menger's graph theorem. J. Math. Anal. Appl., 22:96–111, 1968.
- [804] Henrik Persson. An application of the constructive spectrum of a ring. In *Type Theory and the Integrated Logic of Programs*. Chalmers University and University of Göteborg, 1999. PhD thesis.
- [805] Henrik Persson. Type Theory and the Integrated Logic of Programs. Phd thesis, Chalmers University and University of Göteborg, 1999.
- [806] Jorge Picado and Aleš Pultr. Frames and Locales. Topology without Points. Frontiers in Mathematics. Birkhäuser, Basel, 2012.
- [807] Wolfram Pohlers. Proof theory. Universitext. Springer-Verlag, Berlin, 2009. The first step into impredicativity.
- [808] Andrew Polonsky. Proofs, Types, and Lambda Calculus. PhD thesis, University of Bergen, 2011.
- [809] J.-F. Pommaret and A. Quadrat. A differential operator approach to multidimensional optimal control. *Internat. J. Control*, 77(9):821–836, 2004.
- [810] Jean-François Pommaret and Alban Quadrat. A functorial approach to the behaviour of multidimensional control systems. *Int. J. Appl. Math. Comput. Sci.*, 13(1):7–13, 2003. Multidimensional systems nD and iterative learning control (Czocha Castle, 2000).
- [811] Sally Popkorn. First Steps in Modal Logic. Cambridge University Press, Cambridge, 1994.
- [812] Karl Raimund Popper. On the theory of deduction, Part I. Derivation and its generalizations. *Proc. Kon. Ned. Akad. Wetensch.*, 51(2):173–183, 1948.
- [813] Karl Raimund Popper. On the theory of deduction, Part II. The definitions of classical and intuitionist negation. *Proc. Kon. Ned. Akad. Wetensch.*, 51(3):322–331, 1948.
- [814] Thomas Powell. On the Computational Content of Zorn's Lemma. In *Proceedings of the 35th Annual ACM/IEEE Symposium on Logic in Computer Science*, LICS '20, pages 768–781, New York, NY, USA, 2020. Association for Computing Machinery.
- [815] Thomas Powell, Peter Schuster, and Franziskus Wiesnet. An algorithmic approach to the existence of ideal objects in commutative algebra. In R. Iemhoff and M. Moortgat, editors, 26th Workshop on Logic, Language, Information and Computation (Wollic 2019), Utrecht, Netherlands, 2–5 July 2019, Proceedings, volume 11541 of Lect. Notes Comput. Sci., pages 533–549, Berlin, 2019. Springer.
- [816] Thomas Powell, Peter Schuster, and Franziskus Wiesnet. A universal algorithm for Krull's theorem. *Inform. and Comput.*, 2021. In press. Paper 104761, available online 5 May 2021.
- [817] Mike Prest. Model Theory and Modules. London Mathematical Society Lecture Note Series. Cambridge University Press, 1988.

- [818] Mike Prest. Purity, Spectra and Localisation. Encyclopedia of Mathematics and its Applications. Cambridge University Press, 2009.
- [819] Alexander Prestel and Charles N. Delzell. *Positive Polynomials. From Hilbert's 17th Problem to Real Algebra*. Springer-Verlag, Berlin, 2001.
- [820] John Sydney Pym. A proof of Menger's theorem. Monatsh. Math., 73:81–83, 1969.
- [821] A. Quadrat. The fractional representation approach to synthesis problems: an algebraic analysis viewpoint. I. (Weakly) doubly coprime factorizations. SIAM J. Control Optim., 42(1):266–299 (electronic), 2003.
- [822] A. Quadrat. The fractional representation approach to synthesis problems: an algebraic analysis viewpoint. II. Internal stabilization. SIAM J. Control Optim., 42(1):300–320 (electronic), 2003.
- [823] A. Quadrat. On a generalization of the Youla–Kučera parametrization. I. The fractional ideal approach to SISO systems. Systems Control Lett., 50(2):135–148, 2003.
- [824] A. Quadrat. On a general structure of the stabilizing controllers based on stable range. SIAM J. Control Optim., 42(6):2264–2285 (electronic), 2004.
- [825] A. Quadrat. An algebraic interpretation to the operator-theoretic approach to stabilizability. I. SISO systems. *Acta Appl. Math.*, 88(1):1–45, 2005.
- [826] A. Quadrat. A lattice approach to analysis and synthesis problems. *Math. Control Signals Systems*, 18(2):147–186, 2006.
- [827] A. Quadrat. On a generalization of the Youla–Kučera parametrization. II. The lattice approach to MIMO systems. Math. Control Signals Systems, 18(3):199–235, 2006.
- [828] Alban Quadrat. An introduction to constructive algebraic analysis and its applications. Technical Report 7354, INRIA, 2010.
- [829] Alban Quadrat and Robertz Daniel. homalg: A meta-package for homological algebra. *Journal of Algebra and its Applications, to appear.*, 2008.
- [830] Alban Quadrat and Daniel Robertz. Computation of bases of free modules over the Weyl algebras. *J. Symbolic Comput.*, 42(11–12):1113–1141, 2007.
- [831] M. Quentel. Sur le théorème d'Auslander–Buchsbaum. In Colloque d'Algèbre Commutative (Rennes, 1972), Exp. No. 17, pages 9 pp. Publ. Sém. Math. Univ. Rennes, Année 1972. Univ. Rennes, Rennes, 1972.
- [832] Yann Quentel. Sur une caractérisation des anneaux semihéréditaires commutatifs. C. R. Acad. Sci. Paris Sér. A-B, 266:A266–A267, 1968.
- [833] Yann Quentel. Sur le théorème d'Auslaunder–Buchsbaum. C. R. Acad. Sci. Paris Sér. A-B, 273:A880–A881, 1971.
- [834] Yann Quentel. Sur l'uniforme cohérence des anneaux noethériens. C. R. Acad. Sci. Paris Sér. A-B, 275:A753–A755, 1972.
- [835] W. V. Quine. The problem of simplifying truth functions. The American Mathematical Monthly, 59(8):521–531, 1952.
- [836] W. V. Quine. A way to simplify truth functions. The American Mathematical Monthly, 62(9):627–631, 1955.
- [837] W. V. Quine. On cores and prime implicants of truth functions. *The American Mathematical Monthly*, 66(9):755–760, 1959.
- [838] Panu Raatikainen. Gödel's Incompleteness Theorems. In Edward N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Metaphysics Research Lab, Stanford University, fall 2018 edition, 2018.
- [839] Richard Rado. Note on the transfinite case of Hall's theorem on representatives. J. London Math. Soc., 42:321–324, 1967.
- [840] Christophe Raffali. Nullstellensatz and Positivstellensatz from cut elimination. Technical report, Université de Savoie, 2013.
- [841] Aarne Ranta. Type-theoretical grammar. 1994.
- [842] Jean-Claude Raoult. Proving open properties by induction. Inform. Process. Lett., 29(1):19–23, 1988.
- [843] Helena Rasiowa. An Algebraic Approach to Non-Classical Logics. North-Holland Publishing Company, Amsterdam, 1974.
- [844] Helena Rasiowa and Roman Sikorski. *The Mathematics of Metamathematics*, volume 41 of *Monografie Matematyczne*. Panstwowe Wydawnictwo Naukowe, Warszawa, 1963.

- [845] M. Rathjen. Proof theory of constructive systems: Inductive types and univalence. In G. Jäger and W. Sieg, editors, Feferman on foundations, volume 13 of Outstanding Contributions to Logic, pages 385–419. Springer, 2017.
- [846] Michael Rathjen. Untersuchungen zu teilsystemen der zahlentheorie zweiter stufe und der mengenlehre mit einer zwischen $\delta_2^1 ca$ und $\delta_2^1 ca + bi$ liegenden beweisstärke. Publication of the Institute for Mathematical Logic and Foundational Research of the University of Münster (1989). Extension of 1988 Münster University doctoral thesis.
- [847] Michael Rathjen. Well-ordering proofs in constructive set theory. In preparation.
- [848] Michael Rathjen. Ordinal notations based on a weakly Mahlo cardinal. Arch. Math. Logic, 29(4):249–263, 1990.
- [849] Michael Rathjen. Proof-theoretic analysis of KPM. Arch. Math. Logic, 30(5–6):377–403, 1991.
- [850] Michael Rathjen. The strength of some Martin-Löf type theories, 1993. Report, Ohio State University.
- [851] Michael Rathjen. Proof theory of reflection. Ann. Pure Appl. Logic, 68:181–224, 1994.
- [852] Michael Rathjen. The higher infinite in proof theory. In J.A. Makowsky and E.V. Ravve, editors, *Logic Colloquium* '95. Lecture Notes in Logic, Vol. 11, volume 95, pages 275–304, New York, 1998. Springer.
- [853] Michael Rathjen. The superjump in Martin-Löf type theory. In S. Buss, P. Hajek, and P. Pudlak, editors, Logic Colloquium '98'. Lecture Notes in Logic, Vol. 13. Association for Symbolic Logic (2000), pages 363–386, 1998.
- [854] Michael Rathjen. Explicit mathematics with the monotone fixed point principle. II: Models. *J. Symbolic Logic*, 64(2):517–550, 1999.
- [855] Michael Rathjen. The realm of ordinal analysis. In Barry Cooper and John Truss, editors, Sets and proofs (Leeds, 1997), volume 258 of London Math. Soc. Lecture Note Ser., pages 219–279. Cambridge Univ. Press, Cambridge, 1999.
- [856] Michael Rathjen. The strength of Martin-Löf type theory with a superuniverse. Part I. Arch. Math. Logic, 39:1–39, 2000.
- [857] Michael Rathjen. The strength of Martin-Löf type theory with a superuniverse. Part II. Arch. Math. Logic, 40:207–233, 2001.
- [858] Michael Rathjen. Realizing Mahlo set theory in type theory. Arch. Math. Logic, 42:89–101, 2003.
- [859] Michael Rathjen. The constructive Hilbert program and the limits of Martin-Löf type theory. Synthese, 147:81–120, 2005.
- [860] Michael Rathjen. The disjunction and related properties for constructive Zermelo–Fraenkel set theory. J. Symb. Log., 70:1233–1254, 2005.
- [861] Michael Rathjen. Generalized inductive definitions in constructive set theory. In Laura Crosilla and Peter Schuster, editors, From Sets and Types to Topology and Analysis: Towards Practicable Foundations for Constructive Mathematics, volume 48 of Oxford Logic Guides, chapter 16. Clarendon Press, Oxford, 2005.
- [862] Michael Rathjen. The Art of Ordinal Analysis. In M. Sanz-Solé, J. Soria, J.L. Varona, and J. Verdera, editors, Proceedings of the International Congress of Mathematicians, Madrid 2006, Volume II, pages 45–69. European Mathematical Society, 2006.
- [863] Michael Rathjen. Choice principles in constructive and classical set theories. In *Logic Colloquium '02*, volume 27 of *Lect. Notes Log.*, pages 299–326. Assoc. Symbol. Logic, La Jolla, CA, 2006.
- [864] Michael Rathjen. Choice principles in constructive and classical set theories. In *Logic Colloqium 2002*. A. K. Peters, 2006.
- [865] Michael Rathjen. The formulae-as-classes interpretation of constructive set theory. In *Proof Technology and Computation*. IOS Press, 2006.
- [866] Michael Rathjen. Realizability for constructive Zermelo-Fraenkel set theory. In Logic Colloquim 2003. A. K. Peters, 2006.
- [867] Michael Rathjen. The natural numbers in constructive set theory. Math. Log. Quarterly., 54:83–97, 2008.
- [868] Michael Rathjen. Constructive Zermelo-Fraenkel Set Theory, Power Set, and the Calculus of Constructions. In P. Dybjer, S. Lindstrm, E. Palmgren, and B. G. Sundholm, editors, Epistemology versus Ontology. Essays on the Philosophy and Foundations of Mathematics in Honour of Per Martin-Löf. Springer Netherlands, Dordrecht, 2012.
- [869] Michael Rathjen. Constructive Zermelo-Fraenkel set theory, power set, and the calculus of constructions. In Epistemology versus ontology: Essays on the philosophy and foundations of mathematics in honour of Per Martin-Löf, Springer series: Logic, Epistemology and the Unity of Science, pages 313–349. Springer, Dordrecht, Heidelberg, 2012.
- [870] Michael Rathjen. From the weak to the strong existence property. Ann. Pure Appl. Logic, 163:1400–1418, 2012.

- [871] Michael Rathjen. Relativized ordinal analysis: The case of Power Kripke-Platek set theory. Ann. Pure Appl. Logic, 165:316-339, 2014.
- [872] Michael Rathjen. Indefiniteness in semi-intuitionistic set theories: On a conjecture of Feferman. *Journal of Symbolic Logic*, 81:724–754, 2016.
- [873] Michael Rathjen. Remarks on Barr's theorem. Proofs in geometric theories. In D. Probst and P. Schuster, editors, Concepts of Proof in Mathematics, Philosophy, and Computer Science, volume 6 of Ontos Mathematical Logic, pages 347–374. Walter de Gruyter, Berlin, 2016.
- [874] Michael Rathjen. Remarks on Barr's theorem: proofs in geometric theories. In Concepts of proof in mathematics, philosophy, and computer science. Based on the Humboldt-Kolleg, Bern, Switzerland, September 9–13, 2013, pages 347–374. Berlin: De Gruyter, 2016.
- [875] Michael Rathjen. Proof theory of constructive systems: Inductive types and univalence. In Gerhard Jäger and Wilfried Sieg, editors, Feferman on Foundations Logic, Mathematics, Philosophy, volume 13 of Outstanding Contributions to Logic, pages 385–419. Springer International Publishing, 2017.
- [876] Michael Rathjen. The scope of Feferman's semi-intuitionistic set theories and his second conjecture. *Indagationes Mathematicae*, 30:500–525, 2019.
- [877] Michael Rathjen. Power Kripke-Platek set theory and the axiom of choice. Journal of Logic and Computation, 30:447-457, 2020.
- [878] Michael Rathjen. No speedup for geometric theories, 2021.
- [879] Michael Rathjen. Well-ordering principles in proof theory and reverse mathematics. In Fernando Ferreira, Reinhard Kahle, and Giovanni Sommaruga, editors, *Axiomatic Thinking II*. Springer, 2021.
- [880] Michael Rathjen, Edward R. Griffor, and Erik Palmgren. Inaccessibility in constructive set theory and type theory. Ann. Pure Appl. Logic, 94:181–200, 1998.
- [881] Michael Rathjen and Robert S. Lubarsky. On the regular extension axiom and its variants. *Math. Log. Quarterly*, 49:511–518, 2003.
- [882] Michael Rathjen and Wilfried Sieg. Proof Theory. In Edward N. Zalta, editor, The Stanford Encyclopedia of Philosophy. Metaphysics Research Lab, Stanford University, Fall 2018 edition, 2018.
- [883] Michael Rathjen and Michael Toppel. On relating theories: Proof-theoretical reduction. In S. Centrone, S. Negri, D. Sarikaya, and P. Schuster, editors, Mathesis Universalis, Computability and Proof, volume 412 of Synthese Library, pages 311–331. Springer, Cham, 2019.
- [884] Michael Rathjen and Sergei Tupailo. Characterizing the interpretation of set theory in Martin-Löf type theory. Ann. Pure Appl. Logic, 141:442–471, 2006.
- [885] Michael Rathjen and Sergei Tupailo. Characterizing the interpretation of set theory in Martin-Löf typetheory. Ann. Pure Appl. Logic, 141:442–471, 2006.
- [886] Michael Rathjen and Andreas Weiermann. Proof-theoretic investigations on Kruskal's theorem. Annals of Pure and Applied Logic, 60(1):49–88, 1993.
- [887] Yehuda Rav. Variants of Rado's selection lemma and their applications. Math. Nachr., 79:145–165, 1977.
- [888] Mathys Rennela and Sam Staton. Classical control, quantum circuits and linear logic in enriched category theory. Log. Methods Comput. Sci., 16(1), 2020.
- [889] Greg Restall. An Introduction to Substructural Logics. Routledge, London, 2000.
- [890] Paulo Ribenboim. On the extension of orders in ordered modules. Bull. Austral. Math. Soc., 2(1):81–88, 1970.
- [891] Paulo Ribenboim. On the extension of orders in ordered modules: Corrigenda. Bull. Austral. Math. Soc., 4(2):288–288, 1971.
- [892] Luis Ribes and Pavel Zalesskii. Profinite Groups, volume 40 of Ergebnisse der Mathematik und ihrer Grenzgebiete. Springer-Verlag Berlin Heidelberg, second edition, 2010.
- [893] Fred Richman. Constructive aspects of Noetherian rings. Proc. Amer. Math. Soc., 44:436–441, 1974.
- [894] Fred Richman. Nontrivial uses of trivial rings. Proc. Amer. Math. Soc., 103(4):1012–1014, 1988.
- [895] Fred Richman. Generalized real numbers in constructive mathematics. *Indagationes Mathematicae*, 9(4):595–606, 1998.
- [896] Fred Richman. The regular element property. Proc. Amer. Math. Soc., 126:2123–2129, 1998.

- [897] Fred Richman. The ascending tree condition: constructive algebra without countable choice. Comm. Algebra, 31:1993—2002, 2003.
- [898] Jacques Riguet. Les relations de ferrers. C. R. Acad. Sci., 232:1729–1730, 1951.
- [899] Egbert Rijke, Michael Shulman, and Bas Spitters. Modalities in homotopy type theory. 2017. preprint.
- [900] Davide Rinaldi. *Topologie basic in algebra commutativa*. Tesi di laurea specialistica in matematica, Università degli Studi di Padova. 2010.
- [901] Davide Rinaldi. A formal proof of the projective Eisenbud–Evans–Storch theorem. Arch. Math. (Basel), 99:9–24, 2012.
- [902] Davide Rinaldi. A constructive notion of codimension. J. Algebra, 383:178–196, 2013.
- [903] Davide Rinaldi. Formal Methods in the Theories of Rings and Domains. Doctoral dissertation, Universität München, 2014.
- [904] Davide Rinaldi, Giovanni Sambin, and Peter Schuster. The basic Zariski topology. Confluentes Math., 7:55–81, 2015.
- [905] Davide Rinaldi and Peter Schuster. A universal Krull-Lindenbaum theorem. J. Pure Appl. Algebra, 220:3207–3232, 2016.
- [906] Davide Rinaldi, Peter Schuster, and Daniel Wessel. Eliminating disjunctions by disjunction elimination. Bull. Symb. Logic, 23(2):181–200, 2017.
- [907] Davide Rinaldi, Peter Schuster, and Daniel Wessel. Eliminating disjunctions by disjunction elimination. Technical report, University of Verona, 2017. Preprint.
- [908] Davide Rinaldi, Peter Schuster, and Daniel Wessel. Eliminating disjunctions by disjunction elimination. Indag. Math. (N.S.), 29(1):226–259, 2018.
- [909] Davide Rinaldi, Peter Schuster, and Daniel Wessel. Eliminating disjunctions by disjunction elimination. Indag. Math. (N.S.), 29(1):226–259, 2018. Communicated first in Bull. Symb. Logic 23 (2017), 181–200.
- [910] Davide Rinaldi and Daniel Wessel. Extension by conservation: Sikorski's theorem. Technical report, University of Verona and University of Trento, 2016. Submitted.
- [911] Davide Rinaldi and Daniel Wessel. Some constructive extension theorems for distributive lattices. Technical report, University of Verona and University of Trento, 2017.
- [912] Davide Rinaldi and Daniel Wessel. Extension by conservation. Sikorski's theorem. Log. Methods Comput. Sci., 14(4:8):1–17, 2018.
- [913] Davide Rinaldi and Daniel Wessel. Cut elimination for entailment relations. Arch. Math. Logic, 58(5–6):605–625, 2019.
- [914] Davide Rinaldi and Daniel Wessel. Distributive lattices for profinite spaces. Technical report, University of Verona, 2019.
- [915] Davide Rinaldi and Daniel Wessel. Towards formal Baer criteria. Technical report, University of Verona, 2019.
- [916] Abraham Robinson. Formalism 64. Logic Methodology Philos. Sci., Proc. 1964 Int. Congr., 228-246 (1965)., 1965.
- [917] A. Romero, J. Rubio, and F. Sergeraert. Computing spectral sequences. J. Symbolic Comput., 41(10):1059–1079, 2006.
- [918] Christian Ronse. Why mathematical morphology needs complete lattices. Signal processing, 21(2):129–154, 1990.
- [919] Kimmo I. Rosenthal. Quantales and their Applications, volume 234 of Pitman Research Notes in Mathematics. Longman Scientific & Technical, Essex, 1990.
- [920] Jiří Rosický. Injectivity and accessible categories. Cubo, 4(2):201–211, 2002.
- [921] Gian-Carlo Rota. On the foundations of combinatorial theory I. Theory of Möbius Functions. Z. Wahrscheinlichkeitstheorie verw. Gebiete, 2:340–368, 1964.
- [922] Gian-Carlo Rota. Indiscrete Thoughts. Birkhäuser, Boston, Basel, Berlin, 1997.
- [923] Joseph J. Rotman. An Introduction to Homological Algebra. Universitext. Springer, New York, 2nd edition, 2009.
- [924] F. Rubio, J. and Sergeraert. Computing with locally effective matrices. Int. J. Comput. Math., 82(10):1177–1189, 2005.
- [925] Julio Rubio and Francis Sergeraert. Algebraic models for homotopy types. *Homology Homotopy Appl.*, 7(2):139–160 (electronic), 2005.

- [926] Walter Rudin. Functional Analysis. McGraw-Hill, New York, 1991.
- [927] Ciro Russo. Quantale modules and their operators, with applications. J. Logic Comput., 20(4):917–946, 2010.
- [928] Judith D. Sally and Wolmer V. Vasconcelos. Flat ideals I. Comm. Algebra, 3:531-543, 1975.
- [929] Giovanni Sambin. Intuitionistic formal spaces—a first communication. In D. Skordev, editor, Mathematical Logic and its Applications, Proc. Adv. Internat. Summer School Conf., Druzhba, Bulgaria, 1986, pages 187–204. Plenum, New York, 1987.
- [930] Giovanni Sambin. Pretopologies and completeness proofs. J. Symb. Log., 60(3):861–878, 1995.
- [931] Giovanni Sambin. Steps towards a dynamic constructivism. In P. Gärdenfors et al., editor, In the Scope of Logic, Methodology and Philosophy of Science, volume 315 of Synthese Library, pages 263–286, Dordrecht, 2002. Kluwer. 11th International Congress of Logic, Methodology and Philosophy of Science. Krakow, Poland, August 1999.
- [932] Giovanni Sambin. Some points in formal topology. Theoret. Comput. Sci., 305(1-3):347-408, 2003.
- [933] Giovanni Sambin. Real and ideal in constructive mathematics. In *Epistemology versus Ontology*, volume 27 of *Log. Epistemol. Unity Sci.*, pages 69–85. Springer, Dordrecht, 2012.
- [934] Giovanni Sambin. The Basic Picture. Structures for Constructive Topology. Oxford Logic Guides. Clarendon Press, Oxford, forthcoming.
- [935] Tor Sandqvist. Preservation of structural properties in intuitionistic extensions of an inference relation. Bull. Symb. Log., 24(3):291–305, 2018.
- [936] Luigi Santocanale. A calculus of circular proofs and its categorical semantics. In Mogens Nielsen and Uffe Engberg, editors, Foundations of Software Science and Computation Structures, 5th International Conference, FOSSACS 2002. Held as Part of the Joint European Conferences on Theory and Practice of Software, ETAPS 2002 Grenoble, France, April 8-12, 2002, Proceedings, volume 2303 of Lecture Notes in Computer Science, pages 357–371. Springer, 2002.
- [937] Christian Sattler. The equivalence extension property and model structure. preprint, 2018.
- [938] Motupalli Satyanarayana. Rings with primary ideals as maximal ideals. Math. Scand., 20:52-54, 1967.
- [939] Bruno Scarpellini. On the metamathematics of rings and integral domains. Trans. Amer. Math. Soc, 138:71–96, 1969.
- [940] Andrej Scedrov. Intuitionistic set theory. In L.A. Harrington, M.D. Morley, A. Scedrov, and S.G. Simpson, editors, Harvey Friedman's Research on the Foundations of Mathematics, volume 117 of Studies in Logic and the Foundations of Mathematics, pages 257–284. Elsevier, 1985.
- [941] Jürgen Ludwig Scherb. Anselms philosophische Theologie. Programm-Durchführung-Grundlagen. Kohlhammer, Stuttgart, 2000.
- [942] Konstantin Schlagbauer, Peter Schuster, and Daniel Wessel. Der Satz von Hahn-Banach per Disjunktionselimination. Confluentes Math., 11(1):79–93, 2019.
- [943] James H Schmerl and Saharon Shelah. On power-like models for hyperinaccessible cardinals. *J. Symbolic Logic*, 37(3):531–537, 1972.
- [944] Jürgen Schmidt. Über die Rolle der transfiniten Schlußweisen in einer allgemeinen Idealtheorie. *Math. Nachr.*, 7:165–182, 1952.
- [945] Heinrich Scholz. Die Religionsphilosophie des Als-ob. Ann. Phil., 1(1):27–113, 1919.
- [946] Peter Schuster. A very weak Nullstellensatz over Heyting fields. Indag. Math. (N.S.), 10(1):117–122, 1999.
- [947] Peter Schuster. Countable choice as a questionable uniformity principle. Philos. Math. (3), 12(2):106–134, 2004.
- [948] Peter Schuster. Formal Zariski topology: positivity and points. Ann. Pure Appl. Logic, 137(1-3):317-359, 2006.
- [949] Peter Schuster. The Zariski spectrum as a formal geometry. Theoret. Comput. Sci., 405:101–115, 2008.
- [950] Peter Schuster. Induction in algebra: a first case study. In 2012 27th Annual ACM/IEEE Symposium on Logic in Computer Science, LICS 2012, Dubrovnik, Croatia, pages 581-585. IEEE Computer Society Publications, 2012. Logical Methods in Computer Science (3:20) 9 (2013).
- [951] Peter Schuster. Induction in algebra: a first case study. In 2012 27th Annual ACM/IEEE Symposium on Logic in Computer Science, pages 581–585. IEEE Computer Society Publications, 2012. Proceedings, LICS 2012, Dubrovnik, Croatia.
- [952] Peter Schuster. Induction in algebra: a first case study. Log. Methods Comput. Sci., 9(3):20, 2013.

- [953] Peter Schuster and Helmut Schwichtenberg. Constructive solutions of continuous equations. In One Hundred Years of Russells Paradox, volume 6 of De Gruyter Series in Logic and Its Applications, pages 227–245, 2004.
- [954] Peter Schuster and Daniel Wessel. The Jacobson radical for an inconsistency predicate. submitted to *Computability*, major revision required 16 Oct 2021 and in preparation.
- [955] Peter Schuster and Daniel Wessel. Radical theory of Scott-open predicates. In Mathematical Logic: Proof Theory, Constructive Mathematics, Oberwolfach Report No. 34/2020. Oberwolfach workshop organized by S. R. Buss, R. Iemhoff, U. Kohlenbach, M. Rathjen, 8–14 November 2020.
- [956] Peter Schuster and Daniel Wessel. A general extension theorem for directed-complete partial orders. Rep. Math. Logic, 53:79–96, 2018.
- [957] Peter Schuster and Daniel Wessel. Suzumura consistency, an alternative approach. J. Appl. Logics IfCoLog, 5(1):263–286, 2018.
- [958] Peter Schuster and Daniel Wessel. Some forms of excluded middle for linear orders. Math. Log. Quart., 65(1):105–107, 2019
- [959] Peter Schuster and Daniel Wessel. The computational significance of Hausdorff's maximal chain principle. Technical report, University of Verona, 2020.
- [960] Peter Schuster and Daniel Wessel. The computational significance of Hausdorff's Maximal Chain Principle. In Marcella Anselmo, Gianluca Della Vedova, Florin Manea, and Arno Pauly, editors, Beyond the Horizon of Computability. 16th Conference on Computability in Europe, volume 12098 of Lect. Notes Comput. Sci., pages 239–250. Springer, 2020. Proceedings, CiE 2020, Fisciano, Italy, June 29–July 3, 2020.
- [961] Peter Schuster and Daniel Wessel. Resolving finite indeterminacy. A definitive constructive universal prime ideal theorem. Technical report, University of Verona, 2020.
- [962] Peter Schuster and Daniel Wessel. Resolving finite indeterminacy: A definitive constructive universal prime ideal theorem. In *Proceedings of the 35th Annual ACM/IEEE Symposium on Logic in Computer Science*, LICS '20, pages 820–830, New York, NY, USA, 2020. Association for Computing Machinery.
- [963] Peter Schuster and Daniel Wessel. The Jacobson radical for an inconsistency predicate. Submitted, 2021.
- [964] Peter Schuster and Daniel Wessel. Radical theory of Scott-open predicates. Submitted, 2021.
- [965] Peter Schuster and Daniel Wessel. Syntax for Semantics: Krull's Maximal Ideal Theorem. In Gerhard Heinzmann and Gereon Wolters, editors, *Paul Lorenzen: Mathematician and Logician*, volume 51 of *Log. Epistemol. Unity Sci.*, pages 77–102. Springer, Cham, 2021.
- [966] Peter Schuster, Daniel Wessel, and Ihsen Yengui. Dynamic evaluation of integrity and the computational content of Krull's lemma. J. Pure Appl. Algebra, 226(1), 2022. paper 106794, available online 17 May 2021.
- [967] Peter Schuster and Júlia Zappe. Do Noetherian rings have Noetherian basis functions? In A. Beckmann et al., editor, Logical Approaches to Computational Barriers. Second Conference on Computability in Europe, CiE 2006. Swansea, UK, July 2006, volume 3988 of Lect. Notes Comput. Sci., pages 481–489, Berlin and Heidelberg, 2006. Springer.
- [968] Helmut Schwichtenberg. Minimal from classical proofs. In E. Börger et al., editor, Computer Science Logic. 5th Workshop, CSL '91, Berne, Switzerland, October 7–11, 1991. Proceedings, volume 626 of Lect. Notes Comput. Sci., pages 326–328. Springer, Berlin etc., 1992.
- [969] Helmut Schwichtenberg. Dialectica interpretation of well-founded induction. *Math. Logic Quarterly*, 54(3):229–239, 2008.
- [970] Helmut Schwichtenberg. Realizability interpretation of proofs in constructive analysis. *Theory of Computing Systems*, 43(3):583–602, 2008.
- [971] Helmut Schwichtenberg. Program extraction from proofs: The fan theorem for uniformly coconvex bars. In S. Centrone, S. Negri, D. Sarikaya, and P. Schuster, editors, *Mathesis Universalis, Computability and Proof*, volume 412 of *Synthese Library*, pages 333–341. Springer, Cham, 2019.
- [972] Helmut Schwichtenberg, Monika Seisenberger, and Franziskus Wiesnet. Higman's lemma and its computational content. In Reinhard Kahle, Thomas Strahm, and Thomas Studer, editors, *Advances in Proof Theory*, volume 28 of *Progress in Computer Science and Applied Logic*, pages 353–375. Springer International Publishing Switzerland, Cham, 2016.
- [973] Helmut Schwichtenberg and Christoph Senjak. Minimal from classical proofs. Ann. Pure Appl. Logic, 164:740–748, 2013.
- [974] Helmut Schwichtenberg and Stanley S. Wainer. Proofs and Computations. Perspectives in Logic. Cambridge University Press and Association for Symbolic Logic, Cambridge, England, and Urbana, IL, 2012.

- [975] Dana Scott. Prime ideal theorems for rings, lattices, and Boolean algebras. Bull. Amer. Math. Soc., 60(4):390, 1954.
- [976] Dana Scott. On engendering an illusion of understanding. J. Philos., 68:787–807, 1971.
- [977] Dana Scott. Completeness and axiomatizability in many-valued logic. In Leon Henkin, John Addison, C.C. Chang, William Craig, Dana Scott, and Robert Vaught, editors, Proceedings of the Tarski Symposium (Proc. Sympos. Pure Math., Vol. XXV, Univ. California, Berkeley, Calif., 1971), pages 411–435. Amer. Math. Soc., Providence, RI, 1974.
- [978] Dana Scott. The algebraic interpretation of quantifiers: intuitionistic and classical. In *Andrzej Mostowski and Foundational Studies*, pages 289–312. IOS Press, Amsterdam, 2008.
- [979] Dana Scott and Patrick Suppes. Foundational aspects of theories of measurement. J. Symb. Logic, 23(2):113–128, 1958.
- [980] Dana S. Scott. Background to formalization. In Hugues Leblanc, editor, Truth, syntax and modality (Proc. Conf. Alternative Semantics, Temple Univ., Philadelphia, Pa., 1970), pages 244–273. Studies in Logic and the Foundations of Math., Vol. 68. North-Holland, Amsterdam, 1973.
- [981] Krister Segerberg. An Essay in Classical Modal Logic, volume 13. 1971.
- [982] Abraham Seidenberg. What is Noetherian? Rend. Sem. Mat. Fis. Milano, 44:55-61, 1974.
- [983] Monika Seisenberger. Kruskal's tree theorem in a constructive theory of inductive definitions. In P. Schuster, U. Berger, and H. Osswald, editors, Reuniting the antipodes—constructive and nonstandard views of the continuum (Venice, 1999), volume 306 of Synthese Library, pages 241–255. Kluwer, Dordrecht, 2001.
- [984] Jean-Pierre Serre. Galois Cohomology. Springer Monographs in Mathematics. Springer-Verlag, Berlin, 1997.
- [985] Anton Setzer. Proof theoretical strength of Martin-Löf type theory with W-type and one universe. Phd thesis, Universität München, 1993.
- [986] Anton Setzer. Well-ordering proofs for Martin-Löf type theory. Ann. Pure Appl. Logic, 92:113–159, 1998.
- [987] Anton Setzer. Extending Martin-Löf type theory by one Mahlo-universe. Arch. Math. Logic, 39:155–181, 2000.
- [988] Paul Shafer. Menger's theorem in Π_1^1 -CA₀. Arch. Math. Logic, 51:407–423, 2012.
- [989] Daniyar S. Shamkanov. Non-well-founded derivations in the Gödel-Löb provability logic. Rev. Symb. Log., 13(4):776–796, 2020.
- [990] David William Sharpe and Peter Vámos. *Injective modules*. Cambridge Tracts in Mathematics and Mathematical Physics, 62. Cambridge University Press, Cambridge, 1972.
- [991] Joseph R. Shoenfield. *Mathematical Logic*. Addison-Wesley, Reading, MA, 1967.
- [992] Joseph R. Shoenfield. *Mathematical Logic*. Association for Symbolic Logic, Urbana, IL, 2001. Reprint of the 1973 second printing.
- [993] D. J. Shoesmith and T. J. Smiley. Multiple-Conclusion Logic. Cambridge University Press, Cambridge, 1978.
- [994] Peter W. Shor. Polynominal time algorithms for discrete logarithms and factoring on a quantum computer. In Leonard M. Adleman and Ming-Deh A. Huang, editors, Algorithmic Number Theory, First International Symposium, ANTS-I, Ithaca, NY, USA, May 6-9, 1994, Proceedings, volume 877 of Lecture Notes in Computer Science, page 289. Springer, 1994.
- [995] Michael Shulman. Univalence for inverse diagrams and homotopy canonicity. *Math. Structures Comput. Sci.*, 25(5):1203–1277, 2014.
- [996] Michael Shulman. The univalence axiom for elegant Reedy presheaves. *Homology*, *Homotopy Appl.*, 17(2):81–106, 2015.
- [997] Michael Shulman. All $(\infty, 1)$ -toposes have strict univalent universes, 2019.
- [998] Inger Sigstam. Formal spaces and their effective presentations. Arch. Math. Logic, 34(4):211–246, 1995.
- [999] Roman Sikorski. A theorem on extension of homomorphisms. Annales de la Société Polonaise de Mathématique, 21:332–335, 1948.
- [1000] Roman Sikorski. Boolean Algebras. Ergebnisse der Mathematik und ihrer Grenzgebiete. Band 25. Springer-Verlag Berlin Heidelberg, 1969.
- [1001] Harold Simmons. A framework for topology. In Angus Macintyre, Leszek Pacholski, and Jeff Paris, editors, Logic Colloquium '77, volume 96 of Studies in Logic and the Foundations of Mathematics, pages 239–251. North-Holland Publishing Company, Amsterdam, 1978.

- [1002] Harold Simmons. A curious nucleus. J. Pure Appl. Algebra, 214:2063–2073, 2010.
- [1003] Alex Simpson. The proof theory and semantics of intuitionistic modal logic, 1994. PhD thesis.
- [1004] Alex Simpson. Cyclic arithmetic is equivalent to Peano arithmetic. In Javier Esparza and Andrzej S. Murawski, editors, Foundations of Software Science and Computation Structures 20th International Conference, FOSSACS 2017, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2017, Uppsala, Sweden, April 22-29, 2017, Proceedings, volume 10203 of Lecture Notes in Computer Science, pages 283–300, 2017.
- [1005] Alex K. Simpson. The proof theory and semantics of intuitionistic modal logic. 1994.
- [1006] Stephen G. Simpson. Ordinal numbers and the Hilbert basis theorem. J. Symb. Logic, 53(3):961–974, 1988.
- [1007] Stephen G. Simpson. Subsystems of Second Order Arithmetic. Perspectives in Mathematical Logic. Springer, Berlin, 1999.
- [1008] Stephen G. Simpson. Subsystems of Second Order Arithmetic. Perspectives in Mathematical Logic. Springer, Berlin, 1999.
- [1009] Stephen G. Simpson. Subsystems of second order arithmetic. Cambridge University Press, New York, 2009.
- [1010] Stephen G. Simpson. Subsystems of Second Order Arithmetic. Perspectives in Logic. Cambridge University Press, Cambridge, second edition, 2009.
- [1011] David Singmaster. A Maximal Generalization of Fermat's Theorem. Mathematics Magazine, 39(2):103–107, 1966.
- [1012] Heinz J. Skala. Non-Archimedean Utility Theory. Reidel, Dordrecht, Holland, 1975.
- [1013] Thoralf Skolem. Logisch-kombinatorische Untersuchungen über die Erfüllbarkeit oder Beweisbarkeit mathematischer Sätze nebst einem Theorem über dichte Mengen. Videnskapsselskapets skrifter, 1. Mat.-naturv. klasse, 4:1–36, 1920.
- [1014] Thoralf Skolem. Selected works in logic. Universitetsforlaget, Oslo, 1970.
- [1015] Peter Smith. An Introduction to Gödel's Theorems. Cambridge University Press, Cambridge, second edition, 2013.
- [1016] Agata Smoktunowicz. On some results related to Köthe's conjecture. Serdica Math. J., 27:159–170, 2001.
- [1017] C. Smoryński. Self-reference and modal logic. Universitext. Springer-Verlag, New York, 1985.
- [1018] Craig Smorynski. The Incompleteness Theorems. In Jon Barwise, editor, *Handbook of Mathematical Logic*, volume 90 of *Studies in Logic and the Foundations of Mathematics*, pages 821–865. Elsevier Science B.V., Amsterdam, 1977.
- [1019] Raymond M. Smullyan. Gödel's Incompleteness Theorems. Oxford University Press, Oxford, 1992.
- [1020] Robert Solovay. Provability interpretations of modal logic. Israel Journal of Mathematics, 25(3-4):287-304, 1976.
- [1021] Sergey A. Solovyov. A representation theorem for quantale algebras. In G. Dorfer, G. Eigenthaler, H. Kautschitsch, W. More, and W. B. Müller, editors, *Contributions to General Algebra 18*, pages 189–197, Klagenfurt, 2007. Verlag Johannes Heyn. Proceedings of the Klagenfurt Workshop 2007 on General Algebra.
- [1022] Clifford Spector. Provably recursive functionals of analysis: a consistency proof of analysis by an extension of principles in current intuitionistic mathematics. In J. C. E. Dekker, editor, *Recursive Function Theory*, volume 5 of *Proc. Sympos. Pure Math.*, pages 1–27. American Mathematical Society, Providence, RI, 1962.
- [1023] Detlef Spoerel. A remark on Ribenboim's paper 'On the extension of orders in ordered modules'. Bull. Austral. Math. Soc., 6(2):251–253, 1972.
- [1024] C. Staats. Elementary proof of generic freeness, 2011.
- [1025] The Stacks project authors. The stacks project. https://stacks.math.columbia.edu, 2019.
- [1026] Ernst Steinitz. Algebraische Theorie der Körper. J. Reine Angew. Math., 137:167-309, 1910.
- [1027] Gilbert Stengle. A nullstellensatz and a positivstellensatz in semialgebraic geometry. Math. Ann., 207:87–97, 1974.
- [1028] Andrew Stephenson, Richard Evans, and Marek Sergot. Formalizing kants rules: A logic of conditional imperatives and permissives. *Journal of Philosophical Logic*, 49, 07 2019.
- [1029] Colin Stirling. A tableau proof system with names for modal mu-calculus. In Andrei Voronkov and Margarita V. Korovina, editors, *HOWARD-60: A Festschrift on the Occasion of Howard Barringer's 60th Birthday*, volume 42 of *EPiC Series in Computing*, pages 306–318. EasyChair, 2014.
- [1030] Sana Stojanovic, Julien Narboux, Marc Bezem, and Predrag Janicic. A vernacular for coherent logic. CoRR, abs/1405.3391, 2014.

- [1031] Sana Stojanović, Vesna Pavlović, and Predrag Janičić. A coherent logic based geometry theorem prover capable of producing formal and readable proofs. In *International Workshop on Automated Deduction in Geometry*, pages 201–220. Springer, 2010.
- [1032] Sana Stojanovi-urevi. From informal to formal proofs in euclidean geometry. Ann. Math. Artif. Intell., 85:89–117, 2019.
- [1033] Sana Stojanovi-urevi, Julien Narboux, and Predrag Janii. Automated generation of machine verifiable and readable proofs: A case study of Tarski's geometry. *Ann. Math. Artif. Intell.*, 74:249–269, 2015.
- [1034] Viggo Stoltenberg-Hansen and John V. Tucker. Computable rings and fields. In *Handbook of computability theory*, volume 140 of *Stud. Logic Found. Math.*, pages 363–447. North-Holland, Amsterdam, 1999.
- [1035] Uwe Storch. Bemerkung zu einem Satz von M. Kneser. Arch. Math. (Basel), 23:403-404, 1972.
- [1036] Thomas Streicher. Domain-Theoretic Foundations of Functional Programming. World Scientific, Singapore, 2006.
- [1037] James P. Studd. The iterative conception of set: A (bi-)modal axiomatisation. *Journal of Philosophical Logic*, 42(5):1–29, 2013.
- [1038] Patrick Suppes. Axiomatic Set Theory. Dover Publications, New York, 1972.
- [1039] Kotaro Suzumura. Remarks on the theory of collective choice. Economica, 43(172):381–390, 1976.
- [1040] Andrew Swan. Automorphisms of Partial Combinatory Algebras and Realizability Models of Constructive Set Theory. Phd thesis, University of Leeds, 2014.
- [1041] Andrew Swan. An algebraic weak factorisation system on 01-substitution sets: a constructive proof. *J. Log. Anal.*, 8(1):1–35, 2016.
- [1042] Andrew Swan. Identity types in algebraic model structures and cubical sets. preprint, 2018.
- [1043] Andrew Swan. Separating path and identity types in presheaf models of univalent type theory. preprint, 2018.
- [1044] Andrew Swan. W-types with reductions and the small object argument, 2018.
- [1045] Andrew Swan and Taichi Uemura. On church's thesis in cubical assemblies, 2019.
- [1046] Tibor Szele. On Zorn's lemma. Publ. Math. Debrecen, 1:254–256, 1950.
- [1047] Edward Szpilrajn. Sur l'extension de l'ordre partiel. Fund. Math., 16:368–389, 1930.
- [1048] Gaisi Takeuti. Proof Theory, volume 81 of Studies in Logic and the Foundations of Mathematics. North-Holland Publishing Co., Amsterdam, second edition, 1987. With an appendix containing contributions by Georg Kreisel, Wolfram Pohlers, Stephen G. Simpson and Solomon Feferman.
- [1049] Saburo Tamura. Decision procedure for pseudocomplemented lattices. In *Proceedings of the 8th symposium on semigroups*, volume 5, page 3639. Shimane Univ., Matsue, 1985.
- [1050] Saburo Tamura. A Gentzen formulation without the cut rule for ortholattices. *Kobe Journal of Mathematics*, 5:133–150, 1988.
- [1051] Terence Tao. Soft analysis, hard analysis, and the finite convergence principle. 23 May 2007.
- [1052] Terence Tao. Structure and Randomness: pages from year one of a mathematical blog. American Mathematical Society, 2008.
- [1053] Alfred Tarski. Fundamentale Begriffe der Methodologie der deduktiven Wissenschaften. I. Monatsh. Math. Phys., 37:361–404, 1930.
- [1054] Alfred Tarski. A lattice-theoretical fixpoint theorem and its applications. *Pacific Journal of Mathematics*, 5(2):285 309, 1955.
- [1055] Oswald Teichmüller. Braucht der Algebraiker das Auswahlaxiom? Deutsche Math., 4:567–577, 1939.
- [1056] Jonathan Tennenbaum. A Constructive Version of Hilbert's Basis Theorem. PhD thesis, University of California San Diego, 1973.
- [1057] Myles Tierney. On the spectrum of a ringed topos. In Algebra, topology, and category theory (a collection of papers in honor of Samuel Eilenberg), pages 189–210. Academic Press, New York, 1976.
- [1058] Anne S. Troelstra and Helmut Schwichtenberg. *Basic Proof Theory*. Cambridge University Press, Cambridge, 2nd edition, 2000.
- [1059] Anne S. Troelstra and Dirk van Dalen. Constructivism in Mathematics: an Introduction, volume II of Studies in Logic and the Foundations of Mathematics. North-Holland, Amsterdam, 1988.

- [1060] Anne S. Troelstra and Dirk van Dalen. Constructivism in Mathematics: an Introduction, volume I of Studies in Logic and the Foundations of Mathematics. North-Holland, Amsterdam, 1988.
- [1061] Anne Sjerp Troelstra. On the early history of intuitionistic logic. In Petio Petrov Petkov, editor, *Mathematical Logic*, pages 3–17. Plenum Press, New York, 1990.
- [1062] Davide Trotta and Margherita Zorzi. Compositional theories for host-core languages. CoRR, abs/2006.10604, 2020.
- [1063] John W. Tukey. Convergence and Uniformity in Topology, volume 2 of Ann. Math. Studies. Princeton University Press, Princeton, 1940.
- [1064] Taichi Uemura. Cubical assemblies and the independence of the propositional resizing axiom, 2018. Preprint.
- [1065] The Univalent Foundations Program. Homotopy Type Theory: Univalent Foundations of Mathematics. https://homotopytypetheory.org/book, Institute for Advanced Study, 2013.
- [1066] Alasdair Urquhart. An interpretation of many-valued logic. Mathematical Logic Quarterly, 19(7):111–114, 1973.
- [1067] Alasdair Urquhart. Basic many-valued logic. In Dov M. Gabbay and Franz Guenthner, editors, *Handbook of Philosophical Logic*, volume 2, pages 249–295. Kluwer Academic Publishers, Dordrecht, 2001.
- [1068] Hans Vaihinger. Die Philosophie des Als Ob. System der theoretischen, praktischen und religiösen Fiktionen der Menschheit auf Grund eines idealistischen Positivismus. 7. u. 8. Aufl. Verlag von Felix Meiner, Leipzig, 1922.
- [1069] Hans Vaihinger. The Philosophy of 'As If'. A System of the Theoretical, Practical and Religious Fictions of Mankind. Routledge & Kegan Paul Ltd, London, 1924. Translated by C. K. Ogden.
- [1070] Dimiter Vakarelov. A mereotopology based on sequent algebras. J. Appl. Non-Classical Logics, 27(3–4):342–364, 2017.
- [1071] Silvio Valentini. Every countably presented formal topology is spatial, classically. *J. Symb. Logic*, 71(2):491–500, 2006.
- [1072] Silvio Valentini. Every countably presented formal topology is spatial, classically. *J. Symbolic Logic*, 71(2):491–500, 2006.
- [1073] Mark van Atten and Göran Sundholm. L.E.J. Brouwer's Unreliability of the Logical Principles: A new translation, with an introduction. *History and Philosophy of Logic*, 38(1):24–47, 2017.
- [1074] Dirk van Dalen. Logic and Structure. Universitext. Springer, London, fifth edition, 2013.
- [1075] Benno van den Berg. Non-deterministic inductive definitions. Arch. Math. Logic, 52(1-2):113-135, 2013.
- [1076] Benno van den Berg. Non-deterministic inductive definitions. Arch. Math. Logic, 52(1–2):113–135, 2013.
- [1077] Benno van den Berg. A Kuroda-style j-translation. Arch. Math. Log., 2018.
- [1078] Bartel van der Waerden. Review. Zbl. Math., 24:276, 1941.
- [1079] Wolmer Vasconcelos. *Integral closure*. Springer Monographs in Mathematics. Springer-Verlag, Berlin, 2005. Rees algebras, multiplicities, algorithms.
- [1080] Wolmer V. Vasconcelos. Divisor theory in module categories. North-Holland Publishing Co., Amsterdam, 1974. North-Holland Mathematics Studies, No. 14, Notas de Matemática No. 53. [Notes on Mathematics, No. 53].
- [1081] Wolmer V. Vasconcelos. *The rings of dimension two*. Marcel Dekker Inc., New York, 1976. Lecture Notes in Pure and Applied Mathematics, Vol. 22.
- [1082] Rineke Verbrugge. Provability logic. In E. N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Metaphysics Research Lab, Stanford University, fall 2017 edition, 2017.
- [1083] Steven Vickers. Topology via logic, volume 5 of Cambridge Tracts in Theoretical Computer Science. Cambridge University Press, 1989.
- [1084] Steven Vickers. Constructive points of powerlocales, volume 122. 1997.
- [1085] Luca Viganò. Labelled Non-Classical Logics. Boston, MA, USA: Kluwer Academic Publishers, 2000.
- [1086] Luca Viganò, Marco Volpe, and Margherita Zorzi. A branching distributed temporal logic for reasoning about entanglement-free quantum state transformations. *Inf. Comput.*, 255:311–333, 2017.
- [1087] Pedro Francisco Valencia Vizcaíno. Relations between ex falso, tertium non datur, and double negation elimination. 2013.
- [1088] Pedro Francisco Valencia Vizcaíno. Some Uses of Cut Elimination. Phd thesis, University of Leeds, 2013.

- [1089] Vladimir Voevodsky. How to make software without money. HoTT web forum discussion thread, 13 June 2016.
- [1090] Vladimir Voevodsky. A very short note on homotopy λ -calculus. September 2006.
- [1091] Vladimir Voevodsky. The equivalence axiom and univalent models of type theory. 2010.
- [1092] Vladimir Voevodsky. Univalent Foundations Project, 2010. Available from the author's web page.
- [1093] Vladimir Voevodsky. Univalent Foundations Project, 2010.
- [1094] Vladimir Voevodsky. Univalent Foundations Coq files, 2011.
- [1095] Vladimir Voevodsky. B-systems. submitted, 2014.
- [1096] Vladimir Voevodsky. C-system of a module over a monad on sets. submitted, 2014.
- [1097] Vladimir Voevodsky. Subsystems and regular quotients of C-systems. submitted, 2014.
- [1098] Vladimir Voevodsky. A C-system defined by a universe category. Theory Appl. Categ., 30(37):1181–1214, 2015.
- [1099] Vladimir Voevodsky. An experimental library of formalized mathematics based on the univalent foundations. Math. Structures Comput. Sci, 25:1278–1294, 2015.
- [1100] Vladimir Voevodsky. Lawvere theories and C-systems. 2015.
- [1101] Vladimir Voevodsky. Martin-lof identity types in the C-systems defined by a universe category. arXiv 1505.06446, submitted, 2015.
- [1102] Vladimir Voevodsky. Products of families of types in the C-systems defined by a universe category. submitted, 2015.
- [1103] Vladimir Voevodsky. Lawvere theories and Jf-relative monads. 2016.
- [1104] Vladimir Voevodsky. Products of families of types and (π, λ) -structures on C-systems. Theory Appl. Categ., 31(36):1044-1094, 2016.
- [1105] Vladimir Voevodsky. The C-systems defined by universe categories: presheaves. *Theory Appl. Categ.*, 32(3):53–112, 2017.
- [1106] Vladimir Voevodsky. Cubical and simplicial 2 the coherent nerve of a cubical category (j.w.w. K. Kapulkin), 2017. Seminar talk. Big Proof, Isaac Newton Institute for Mathematical Sciences.
- [1107] Vladimir Voevodsky. The (π, λ) -structures on the C-systems defined by universe categories. Theory Appl. Categ., 32(4):113–121, 2017.
- [1108] Vladimir Voevodsky. What is constructive mathematics and why it is important, 2017. Invited talk at GISS 2017.
- [1109] John von Neumann. Eine Axiomatisierung der Mengenlehre. J. Reine Angew. Math., 154:219–240, 1925.
- [1110] Jan von Plato. In search of the sources of incompleteness. In *Proc. Int. Cong. of Math. 2018, Rio de Janeiro, Vol. 3*, pages 4043–4061, 2018.
- [1111] San-min Wang and Petr Cintula. Logics with disjunction and proof by cases. Arch. Math. Logic, 47(5):435–446, 2008.
- [1112] Heinrich Wansing. Constructive negation, implication, and co-implication. *Journal of Applied Non-Classical Logics*, 18(2-3):341–364, 2008.
- [1113] MathOverflow Q&A website. Is the non-triviality of the algebraic dual of an infinite-dimensional vector space equivalent to the axiom of choice? Asked 14th December 2010.
- [1114] Charles A. Weibel. An Introduction to Homological Algebra. Cambridge Studies in Advanced Mathematics. Cambridge University Press, Cambridge, 1994.
- [1115] Paul Weingartner. Philosophische Probleme und ihre Verwurzelung in der Mathematik. In Hans-Christian Reichel and Enrique Prat de la Riba, editors, *Naturwissenschaft und Weltbild. Mathematik und Quantenphysik in unserem Denk- und Wertesystem.*, pages 147–176, Wien, 1992. Hlder-Pichler-Tempsky.
- [1116] Philip D. Welch. Ultimate truth vis à vis stable truth. Review of Symbolic Logic, 1(1):126–142, 2008.
- [1117] Philip D. Welch. Games for truth. Bulletin of Symbolic Logic, 15:410–427, 2009.
- [1118] Felix Wellen. Cartan geometry in modal homotopy type theory, 2018.
- [1119] Benjamin Werner. Sets in types, types in sets. In Proceedings of TACS '97, pages 530–546. Springer, 1997.
- [1120] Daniel Wessel. Choice, extension, conservation. From transfinite to finite proof methods in abstract algebra. Phd thesis, Università degli Studi di Trento, 2018.

- [1121] Daniel Wessel. Point-free spectra of linear spreads. Preprint, 2018.
- [1122] Daniel Wessel. Points, ideals, and geometric sequents. Technical report, University of Verona, 2018.
- [1123] Daniel Wessel. Ordering groups constructively. Comm. Algebra, 47(12):4853-4873, 2019.
- [1124] Daniel Wessel. Point-free spectra of linear spreads. In S. Centrone, S. Negri, D. Sarikaya, and P. Schuster, editors, Mathesis Universalis, Computability and Proof, Synthese Library, pages 353-374. Springer, Cham, 2019.
- [1125] Daniel Wessel. Making the use of maximal ideals inductive, 2021. Talk at Workshop Reducing complexity in algebra, logic, combinatorics.
- [1126] Daniel Wessel. A note on connected reduced rings. J. Comm. Algebra, 13(4):583–588, 2021.
- [1127] Thomas Weston. Approximate truth. J. Philos. Log., 16(2):203–227, 1987.
- [1128] Franziskus Wiesnet. An algorithmic version of Zariski's lemma. In Liesbeth De Mol, Andreas Weiermann, Florin Manea, and David Fernández-Duque, editors, Connecting with Computability. 17th Conference on Computability in Europe, CiE 2021 Virtual Event, Ghent, July 5–9, 2021, Proceedings, volume 12813 of Lecture Notes in Computer Science, pages 469–482. Springer, 2021.
- [1129] Franziskus Wiesnet. The Computational Content of Abstract Algebra and Analysis. PhD thesis, Ludwig-Maximilians Universtät München, Università degli Studi di Trento, Università degli Studi di Verona, 2021.
- [1130] Ernst Witt. Sobre el teorema de Zorn. Revista Mat. Hisp.-Amer. (4), 10:82-85, 1950.
- [1131] Ernst Witt. Beweisstudien zum Satz von M. Zorn. Math. Nachr., 4:434-438, 1951.
- [1132] Ryszard Wójcicki. Theory of logical calculi. Basic theory of consequence operations, volume 199 of Synthese Library. Kluwer Academic Publishers Group, Dordrecht, 1988.
- [1133] W. Hugh Woodin. A potential subtlety concerning the distinction between determinism and nondeterminism. In Michal-Heller and W. H. Woodin, editors, *Infinity: New Research Frontiers*, page 119. Cambridge University Press, 2011.
- [1134] Gavin Wraith. Generic Galois theory of local rings. In M. P. Fourman, C. J. Mulvey, and D. S. Scott, editors, Applications of Sheaves. Proceedings of the Research Symposium on Applications of Sheaf Theory to Logic, Algebra and Analysis, Durham, July 9-21, 1977, pages 739–767. Springer-Verlag, Berlin, 1979.
- [1135] Gavin C. Wraith. Intuitionistic algebra: some recent developments in topos theory. In *Proceedings of the International Congress of Mathematicians (Helsinki, 1978)*, pages 331–337, Helsinki, 1980. Acad. Sci. Fennica.
- [1136] Benjamin H. Yandell. The Honors Class: Hilbert's Problems and Their Solvers. AK Peters, Natick, MA, 2002.
- [1137] Ihsen Yengui. An algorithm for the divisors of monic polynomials over a commutative ring. *Math. Nachr.*, 260(1):93–99, 2003.
- [1138] Ihsen Yengui. Dynamical Gröbner bases. Journal of Algebra, 301:447–458, 2006.
- [1139] Ihsen Yengui. Stably free modules over r[x] of rank $> \dim r$ are free. Preprint, 2007.
- [1140] Ihsen Yengui. Making the use of maximal ideals constructive. Theoret. Comput. Sci., 392:174–178, 2008.
- [1141] Ihsen Yengui. Constructive Commutative Algebra. Projective Modules over Polynomial Rings and Dynamical Gröbner Bases, volume 2138 of Lecture Notes in Mathematics. Springer, Cham, 2015.
- [1142] H. Peyton Young and Shmuel Zamir, editors. *Handbook of Game Theory, Volume 4.* Handbooks in Economics. North-Holland, Amsterdam, 1st edition, 2015.
- [1143] Richard Zach. Hilbert's Program. In Edward N. Zalta, editor, *The Stanford Encyclopedia of Philosophy*. Metaphysics Research Lab, Stanford University, spring 2016 edition, 2016.
- [1144] Edward N. Zalta. Abstract objects: An introduction to axiomatic metaphysics. Dordrecht, Netherland: D. Reidel, 1983.
- [1145] Edward N. Zalta. Logic and metaphysics. Journal of Indian Council of Philosophical Research, 27(2):155–184, 2010.
- [1146] Oscar Zariski and Pierre Samuel. Commutative Algebra. Van Nostrand, Princeton, NJ, 1958. Volume I.
- [1147] Ernst Zermelo. Beweis, daß jede Menge wohlgeordnet werden kann. Math. Ann., 59:514-516, 1904.
- [1148] Ernst Zermelo. Neuer Beweis für die Möglichkeit einer Wohlordnung. Math. Ann., 65:107–128, 1908.
- [1149] Ernst Zermelo. Über Grenzzahlen und Mengenbereiche. Fund. Math., 16:29–47, 1930.
- [1150] Guo-Qiang Zhang. Logic of Domains. Birkhäuser Boston, 1991.

- [1151] Xia Zhang and Valdis Laan. On injective hulls of s-posets. Semigroup Forum, 91:62–70, 2015.
- [1152] Xia Zhang and Tingyu Li. On nuclei and conuclei of s-quantales. Quasigroups Related Systems, 25:155–164, 2017.
- [1153] Albert Ziegler. Large Sets in Constructive Set Theory. Phd thesis, University of Leeds, 2014.
- [1154] Max Zorn. A remark on method in transfinite algebra. Bull. Amer. Math. Soc., 41:667–670, 1935.
- [1155] Margherita Zorzi. On quantum lambda calculi: a foundational perspective. *Math. Struct. Comput. Sci.*, 26(7):1107–1195, 2016.
- $[1156] \ {\it Margherita Zorzi.} \ {\it Quantum calculi-from theory to language design.} \ {\it Applied Sciences}, \, 9(24), \, 2019.$