

# Dexter Campbell Kozen

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## Birthdate

December 20, 1951

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## Citizenship

USA

## Family status

Married (Frances),  
three children

## Education

6/74 BA summa cum laude, Mathematics, Dartmouth College  
5/77 MS, PhD, Computer Science, Cornell University

## Employment

Kiewit Computation Center, Dartmouth College  
1/71–7/74 Systems Programmer  
Digicomp Research, Ithaca, NY  
6/76–5/77 Consultant  
University of California, Berkeley  
9/77–9/78 Postdoctoral Fellow  
IBM Research, Yorktown Heights, NY  
9/78–9/81 Research Staff Member  
9/82–9/85 Research Staff Member  
9/82–8/85 Manager, Theory of Computation Project  
Aarhus University, Denmark  
9/81–9/82 Visiting Professor, Computer Science  
9/91–9/92 Visiting Professor, Computer Science  
Columbia University  
1/84–8/85 Adjunct Professor, Computer Science  
Cornell University  
8/85–12/88 Associate Professor, Computer Science  
1/89–10/94 Professor, Computer Science  
11/94– Joseph Newton Pew, Jr. Professor in Engineering

**Awards and Honors**

- 6/74 John G. Kemeny Prize in Computing, Dartmouth College
- 9/74 Sage Graduate Fellowship, Cornell University
- 5/80 Outstanding Innovation Award, IBM Corporation
- 7/91 Fellow-in-Service, Cornell University
- 8/91 Fellow, John Simon Guggenheim Foundation
- 1/93 Prize “Nagrode” for paper [22], Polish Ministry of Education
- 4/94 Faculty of the Year, Association of Computer Science Undergraduates, Cornell
- 3/00 Class of 1960 Scholar, Williams College
- 4/01 Stephen and Margery Russell Distinguished Teaching Award, College of Arts and Sciences, Cornell
- 12/01 Prize “Nagrode” for book [224], Polish Ministry of Education
- 11/03 Fellow, ACM
- 11/08 Fellow, AAAS
- 12/08 Michael Tien ’72 Excellence in Teaching Award, College of Engineering, Cornell
- 6/11 LICS Test-of-Time Award for paper [102]
- 6/13 Faculty of the Year, Association of Computer Science Undergraduates, Cornell
- 8/13 Daniel M. Lazar ’29 Excellence in Teaching Award, College of Engineering, Cornell
- 1/15 Fellow, EATCS
- 2/16 EATCS Award, European Association for Theoretical Computer Science
- 5/16 W. Wallace McDowell Award, IEEE Computer Society
- 11/18 Stephen H. Weiss Presidential Fellow, Cornell University
- 1/20 POPL Distinguished Paper Award for [174]
- 5/22 Alonzo Church Award for paper [37], ACM SIGLOG, EATCS, EACSL, Kurt Gödel Society
- 10/23 OOPSLA Best Paper Award for [74]

**Invited Lectures**

- 9/79 Second Symp. Fund. Comput. Theory, Berlin [80]
- 8/90 Math. Found. Comput. Sci., Banska-Bystrica, Slovakia [101]
- 6/92 Symp. on Logical Methods, Ithaca, New York [25]
- 9/93 Second Symp. Europ. Assoc. Comput. Sci. Logic (EACSL), Swansea [110]
- 9/94 First Symp. Constraints in Computational Logics, Munich [111]
- 12/94 Foundations Software Technology and Theor. Comput. Sci., Madras [113]
- 4/95 Fifth Int. Conf. Theory and Practice Software Development (TAPSOFT), Aarhus [115]
- 3/96 Second Int. Workshop Tools and Algorithms for the Construction and Analysis of Systems (TACAS’96), Passau [114]
- 1/98 Amer. Math. Soc. Joint Mathematics Meetings
- 8/99 11th Int. Congress of Logic, Methodology and Philosophy of Science, Krakow, Poland [45]
- 9/99 Math. Found. Comput. Sci., Szklarska Poreba, Poland [123]
- 1/00 5th Conf. Relational Methods in Computer Science (RelMiCS), Quebec, Canada [125]
- 2/01 18th Int. Symp. Theor. Aspects of Comp. Sci. (STACS), Dresden, Germany [127]
- 7/01 8th Workshop on Logic, Language, Information and Computation (WoLLIC),

- Brasilia, Brazil [47]
- 3/02 Workshop on Weighted Automata (WATA'02), Dresden, Germany
- 3/02 Clifford Lectures, Tulane University, New Orleans
- 7/02 Conf. Mathematics of Program Construction (MPC'02), Dagstuhl, Germany [131]
- 7/02 Workshop on Fixed Points in Computer Science (FICS'02), Copenhagen [130]
- 9/02 7th Int. Symp. Formal Techniques in Real-Time and Fault Tolerant Systems (FTRFT'02), Oldenburg, Germany [129]
- 9/03 10th Int. Conf. Logic for Programming, Artificial Intelligence and Reasoning (LPAR'03), Almaty, Kazakhstan
- 1/04 Workshop on Logic and Computation, Nelson, NZ
- 4/04 Latin American Theoretical INformatics (LATIN'04), Buenos Aires
- 8/06 Math. Found. Comput. Sci., High Tatras, Slovakia
- 3/08 Workshop on Modal Fixpoint Logics, Amsterdam
- 4/08 9th Int. Workshop Coalgebraic Methods in Computer Science (Keynote), Budapest
- 6/08 23rd Symp. Logic in Computer Science, Pittsburgh
- 9/08 British Logic Colloquium, Nottingham, UK
- 1/11 Australian Computer Science Week (Keynote), Perth, Australia
- 1/11 28th Conf. Math. Found. Programming Semantics (MFPS XXVIII),  
Dubrovnik, Croatia [148]
- 7/12 14th Int. Workshop Descriptive Complexity of Formal Systems (DCFS'12)  
(Keynote), Braga, Portugal [59]
- 6/14 Math. Found. Programming Semantics (MFPS XXX), Ithaca, New York
- 11/14 Asian Symposium on Programming Language and Systems (APLAS'14)  
(Keynote), Singapore
- 5/15 10th Alpine Verification Meeting (AVM), Attersee, Austria
- 4/17 Theory Day, Reykjavik, Iceland
- 5/17 Summer School on Probabilistic Programming, Braga, Portugal
- 6/17 Math. Found Programming Semantics, Ljubljana, Slovenia
- 6/17 Infinity Workshop, Reykjavik, Iceland
- 9/17 Tbilisi Symposium on Language, Logic and Computation, Tbilisi, Georgia
- 7/18 Coalgebra Now Workshop, Oxford, UK
- 5/19 2019 Milner Lecture, School of Informatics, University of Edinburgh
- 10/19 2nd Dali Workshop: Dynamic Logic, New Trends and Applications,  
3rd World Congress on Formal Methods, Porto, Portugal
- 4/20 Steklov Institute, Moscow
- 6/20 Math. Found. Programming Semantics (MFPS'20), Paris (keynote)
- 4/24 17th Int. Workshop Coalgebraic Methods in Computer Science (CMCS 2024),  
Luxembourg City, keynote (declined)
- 6/24 30th Workshop on Logic, Language, Information and Computation (WoLLIC'24),  
Bern, Switzerland

## Professional Activities

Program Committees

- IEEE Symp. Foundations of Computer Science (FOCS), 1981, 1983, 1984, 1988 (chair), 1993, 1996  
 Symp. on Fundamentals of Computation Theory (FCT), 1983, 1985, 1987  
 Workshop on Logics of Programs, 1981, 1983, 1985  
 IEEE Symp. Logic in Computer Science (LICS), 1986, 1989, 1994, 1995 (chair), 2007, 2015  
 ACM Symp. Principles of Programming Languages (POPL), 1986, 2017, 2021  
 ACM Symp. Theory of Computing (STOC), 1987, 1990  
 IEEE Symp. Structure in Complexity Theory, 1990  
 Int. Colloq. Automata, Languages, and Programming (ICALP), 1992  
 Fourth Int. Conf. Theory and Practice of Software Development (TAPSOFT), April 1993  
 Principles and Practice of Constraint Programming, April 1993  
 Symp. on Quantifier Elimination and Cylindrical Algebraic Decomposition  
     in Honor of George Collins, October 1993  
 Scandinavian Workshop on Algorithm Theory, 1994  
 Workshop on Fixpoints in Computer Science (FiCS), 1998, 2013  
 Foundations of Software Science and Computation Structure (FoSSaCS), 1999, 2000, 2019, 2021  
 Math. Foundations of Computer Science (MFCS), 2000, 2004, 2017  
 Workshop on Logic, Language, Information and Computation (WoLLIC), 2003, 2017  
 Int. Conf. Mathematics of Program Construction (MPC), 2002, 2004 (chair), 2006  
 Int. Sem. Relational Methods in Computer Science (RAMiCS), 2003, 2017, 2018, 2020  
 Int. Workshop Applications of Kleene Algebra, 2003  
 Computing: the Australasian Theory Symposium (CATS), 2012  
 Mathematical Foundations of Programming Semantics (MFPS), 2013 (chair), 2014, 2019, 2020  
 Dynamic Logic: New Trends and Applications (DaLi), 2017, 2019  
 Int. Conf. Logic for Programming, Artificial Intelligence and Reasoning (LPAR), 2015, 2017, 2018  
 Tbilisi Symposium on Language, Logic and Computation (TbiLLC), 2015  
 Int. Symp. Theoretical Aspects of Software Engineering (TASE), 2016  
 Conf. Algebra and Coalgebra in Computer Science (CALCO), 2015  
 Int. Conf. Language and Automata Theory and Applications (LATA), 2020  
 Int. Conf. Coalgebraic Methods in Computer Science (CMCS), 2020
- Organizing Committees
- IEEE Symp. on Logic in Computer Science, 1986–1992, 1994–1999  
 Workshop on Logics of Programs, 1981, 1983, 1985  
 Dagstuhl Workshop on Algebraic Complexity and Parallelism, July 1992  
 Symposium in honor of Juris Harmanis and Richard Stearns, March 1994  
 Dagstuhl Seminar on Tree Automata, October 1997  
 Dagstuhl Seminar on Applications of Kleene Algebra, February 2001  
 Logics for System Analysis, July 2010
- Local Arrangements
- Workshop on Logics of Programs, 1981  
 IEEE Symp. on Logic in Computer Science, 1987  
 IEEE Symp. on Structure in Complexity Theory, 1987  
 Mathematical Foundations of Programming Semantics, 2014

## Editorial Boards

Information and Control, 1984–1986  
Annals of Pure and Applied Logic, 1987 (special issue)  
J. Comput. Syst. Sci., 1988 (special issue)  
J. Algorithms, 1988 (special issue)  
Info. and Computation, 2000 (special issue)  
SIAM J. Comput., 1989–1994  
J. Relational Methods in Computer Science, 2000–  
Theory of Computing Systems, 2001–

## Advisory Boards

Centre for Basic Research in Computer Science (BRICS), Aarhus University  
ACM/IEEE Symp. Logic in Computer Science, 1999–  
ACM SIGLOG advisory board, 2014

## Other Committees

Taulbee survey, Computing Research Assoc., 1997, chair 1998  
Gödel prize committee, ACM, 2000–2003, chair 2003  
Logic in Computer Science Test-of-Time award committee, chair, 2014  
Ackermann award committee, 2017, 2018, 2019

**PhD Theses Supervised**

1. Bradley T. Vander Zanden. *Incremental Constraint Satisfaction and its Application to Graphical Interfaces*. PhD thesis, Cornell University, August 1988.
2. Matthew T. Dickerson. *The Functional Decomposition of Polynomials*. PhD thesis, Cornell University, May 1989.
3. Douglas J. Ierardi. *The Complexity of Quantifier Elimination in the Theory of an Algebraically Closed Field*. PhD thesis, Cornell University, May 1989.
4. Mark B. Novick. *Parallel Algorithms for Intersection Graphs*. PhD thesis, Cornell University, May 1990.
5. Nils Klarlund. *Progress Measures and Finite Arguments for Infinite Computations*. PhD thesis, Cornell University, August 1990.
6. Devdatt Dubhashi. *Algorithmic Investigations in  $p$ -adic Fields*. PhD thesis, Cornell University, August 1992.
7. Eugene Ressler. *ALEX—A Paradigm for the Expression and Compilation of Matrix Functions*. PhD thesis, Cornell University, May 1993.
8. Kjartan Stefánsson. *Newtonian Graphs, Riemann Surfaces, and Computation*. PhD thesis, Cornell University, May 1995.

9. David Pearson. *Parallel Computing as a Commodity*. PhD thesis, Cornell University, December 1997.
10. Agnes Szanto. *Computation with Polynomial Systems*. PhD thesis, Cornell University, August 1998.
11. Arthur Neal Glew. *Low-Level Type Systems for Modularity and Object-Oriented Features*. PhD thesis, Cornell University, January 2000.
12. Sarah A. Spence. *Subspace Subcodes and Generalized Coset Codes*. PhD thesis, Cornell University, May 2002.
13. Hubert Chen. *The Computational Complexity of Quantified Constraint Satisfaction*. PhD thesis, Cornell University, August 2004.
14. Christopher Hardin. *The Horn Theory of Relational Kleene Algebra*. PhD thesis, Cornell University, May 2005.
15. Kamal Aboul-Hosn. *A Proof-Theoretic Approach to Mathematical Knowledge Management*. PhD thesis, Cornell University, December 2006.
16. Alexa Sharp. *Incremental Algorithms: Solving Problems in a Changing World*. PhD thesis, Cornell University, May 2007.
17. Jeffrey Hartline. *Incremental Optimization*. PhD thesis, Cornell University, August 2007.
18. James Michael Worthington. *Automata, Representations, and Proofs*. PhD thesis, Cornell University, August 2009.
19. Nikolaos Karampatziakis. *Online Learning Algorithms for Sequence Prediction, Importance-Weighted Classification, and Active Learning*. PhD thesis, Cornell University, May 2012.
20. Jean-Baptiste Jeannin. *Capsules and Non-Well-Founded Computation*. PhD thesis, Cornell University, August 2013.
21. Konstantinos Mamouras. *Extensions of Kleene Algebra for Program Verification*. PhD thesis, Cornell University, August 2015.
22. Xiang Long. *Primitives for Match-Action in Theory and Practice*. PhD thesis, Cornell University, May 2021.
23. Michael Roberts. *Stochastic Dynamic Logics*. PhD thesis, Cornell University, December 2022.
24. Pedro Henrique Azevedo de Amorim. *A Unifying Semantics for Markov Kernels and Linear Operators*. PhD thesis, Cornell University, August 2023.

# Dexter Campbell Kozen

## Publications

June 7, 2024

### Journal Articles

1. Dexter Kozen. A clique problem equivalent to graph isomorphism. *SIGACT News*, 10(2):50–52, June 1978.
2. Dexter Kozen. Complexity of Boolean algebras. *Theor. Comput. Sci.*, 10:221–247, 1980.
3. Dexter Kozen. Indexings of subrecursive classes. *Theor. Comput. Sci.*, 11:277–301, 1980.
4. Ashok Chandra, Dexter Kozen, and Larry Stockmeyer. Alternation. *J. Assoc. Comput. Mach.*, 28(1):114–133, 1981. doi:10.1145/322234.322243.
5. Dexter Kozen. Positive first-order logic is *NP*-complete. *IBM J. Res. Develop.*, 25(4):327–332, July 1981.
6. Dexter Kozen. Semantics of probabilistic programs. *J. Comput. Syst. Sci.*, 22(3):328–350, June 1981. doi:10.1016/0022-0000(81)90036-2.
7. Dexter Kozen and Rohit Parikh. An elementary proof of the completeness of *PDL*. *Theor. Comput. Sci.*, 14(1):113–118, 1981.
8. David Harel, Dexter Kozen, and Rohit Parikh. Process logic: Expressiveness, decidability, completeness. *J. Comput. Syst. Sci.*, 25(2):144–170, 1982.
9. Dexter Kozen. Results on the propositional  $\mu$ -calculus. *Theor. Comput. Sci.*, 27:333–354, 1983.
10. Dexter Kozen. A Ramsey theorem with infinitely many colors. In Lenstra, Lenstra, and van Emde Boas, editors, *Dopo Le Parole*, pages 71–72. University of Amsterdam, Amsterdam, May 1984.
11. David Harel and Dexter Kozen. A programming language for the inductive sets, and applications. *Information and Control*, 63(1–2):118–139, 1984.
12. Dexter Kozen. A probabilistic *PDL*. *J. Comput. Syst. Sci.*, 30(2):162–178, April 1985.
13. Andreas Blass, Yuri Gurevich, and Dexter Kozen. A zero-one law for logic with a fixed-point operator. *Information and Control*, 67(1-3):70–90, 1985.
14. Michael Ben-Or, Dexter Kozen, and John Reif. The complexity of elementary algebra and geometry. *J. Comput. Syst. Sci.*, 32(2):251–264, 1986.

15. Krzysztof Apt and Dexter Kozen. Limits for automatic verification of finite-state concurrent systems. *Information Processing Letters*, 22:307–309, 1986.
16. Dexter Kozen. Fast parallel orthogonalization. *SIGACT News*, 18(2):47, Fall 1986.
17. Dexter Kozen. A finite model theorem for the propositional  $\mu$ -calculus. *Studia Logica*, 47(3):233–241, 1988.
18. Michael Ben-Or, Ephraim Feig, Dexter Kozen, and Prason Tiwari. Fast parallel algorithms for finding the roots of a polynomial with all real roots. *SIAM J. Comput.*, 17(6):1081–1092, 1988. doi:10.1137/0217069.
19. Dexter Kozen and Susan Landau. Polynomial decomposition algorithms. *J. Symb. Comput.*, 7:445–456, 1989.
20. Neil Immerman and Dexter Kozen. Definability with bounded number of bound variables. *Infor. and Comp.*, 83(2):121–139, November 1989.
21. Wilfred Chen, John Field, Dexter Kozen, William Pugh, Tim Teitelbaum, and Brad Vander Zanden. ALEX—an alexical programming language. In Ichikawa, Jungert, and Korfhage, editors, *Visual Languages and Applications*, pages 147–158. Plenum Press, 1990.
22. Dexter Kozen and Jerzy Tiuryn. Logics of programs. In J. van Leeuwen, editor, *Handbook of Theoretical Computer Science*, volume B, pages 789–840. North Holland, Amsterdam, 1990.
23. Dexter Kozen. On action algebras. In J. van Eijck and A. Visser, editors, *Logic and Information Flow*, pages 78–88. MIT Press, 1994.
24. Dexter Kozen. On the Myhill-Nerode theorem for trees. *Bull. Europ. Assoc. Theor. Comput. Sci.*, 47:170–173, June 1992.
25. Dexter Kozen. Partial automata and finitely generated congruences: An extension of Nerode’s theorem. In J. N. Crossley, J. B. Remmel, R. A. Shore, and M. E. Sweedler, editors, *Logical Methods: In Honor of Anil Nerode’s Sixtieth Birthday*, pages 490–511. Birkhäuser, Ithaca, New York, 1993.
26. Doug Ierardi and Dexter Kozen. Parallel resultant computation. In J. Reif, editor, *Synthesis of Parallel Algorithms*, pages 679–720. Morgan Kaufmann, 1993.
27. Dexter Kozen and Shmuel Zaks. Optimal bounds for the change-making problem. *Theor. Comput. Sci.*, 123:377–388, 1994.
28. Dexter Kozen. A completeness theorem for Kleene algebras and the algebra of regular events. *Infor. and Comput.*, 110(2):366–390, May 1994.



29. Dexter Kozen, Jens Palsberg, and Michael I. Schwartzbach. Efficient inference of partial types. *J. Comput. Syst. Sci.*, 49(2):306–324, October 1994.
30. Alexander Aiken, Dexter Kozen, and Edward Wimmers. Decidability of systems of set constraints with negative constraints. *Infor. and Comput.*, 122(1):30–44, October 1995.
31. Dexter Kozen, Jens Palsberg, and Michael I. Schwartzbach. Efficient recursive subtyping. *Mathematical Structures in Computer Science*, 5:113–125, 1995.
32. Dexter Kozen, Susan Landau, and Richard Zippel. Decomposition of algebraic functions. *Journal of Symbolic Computation*, 22(3):235–246, September 1996.
33. Nils Klarlund and Dexter Kozen. Rabin measures. *Chicago Journal of Theoretical Computer Science*, 1995(3), September 1995.
34. Dexter Kozen. On regularity-preserving functions. *Bull. Europ. Assoc. Theor. Comput. Sci.*, 58:131–138, February 1996.
35. Dexter Kozen. Rational spaces and set constraints. *Theoretical Computer Science*, 167:73–94, 1996.
36. Dexter Kozen and Kjartan Stefansson. Computing the Newtonian graph. *Journal of Symbolic Computation*, 24:125–136, 1997.
37. Dexter Kozen. Kleene algebra with tests. *ACM Trans. Programming Languages and Systems (TOPLAS'97)*, 19(3):427–443, May 1997. doi:10.1145/256167.256195.
38. Dexter Kozen. Set constraints and logic programming. *Information and Computation*, 142(1):2–25, April 1998.
39. Dexter Kozen. On Hoare logic and Kleene algebra with tests. *Trans. Computational Logic*, 1(1):60–76, July 2000.
40. Ernie Cohen and Dexter Kozen. A note on the complexity of propositional Hoare logic. *Trans. Computational Logic*, 1(1):171–174, July 2000.
41. Dexter Kozen and Jerzy Tiuryn. On the completeness of propositional Hoare logic. *Information Sciences*, 139(3–4):187–195, 2001.
42. David Harel, Dexter Kozen, and Jerzy Tiuryn. Dynamic logic. In D. M. Gabbay and F. Guenther, editors, *Handbook of Philosophical Logic*, volume 4, pages 99–217. Kluwer, 2nd edition, 2002.
43. Dexter Kozen. On the complexity of reasoning in Kleene algebra. *Information and Computation*, 179:152–162, 2002.
44. Robert Givan, David McAllester, Carl Witty, and Dexter Kozen. Tarskian set constraints. *Information and Computation*, 174(2):105–131, May 2002.

45. Dexter Kozen. On Hoare logic, Kleene algebra, and types. In P. Gärdenfors, J. Woleński, and K. Kijania-Placek, editors, *In the Scope of Logic, Methodology, and Philosophy of Science: Volume 1 of the 11th Int. Congress Logic, Methodology and Philosophy of Science, Cracow, August 1999*, volume 315 of *Studies in Epistemology, Logic, Methodology, and Philosophy of Science*, pages 119–133. Kluwer, 2002.
46. Dexter Kozen and Jerzy Tiuryn. Substructural logic and partial correctness. *Trans. Computational Logic*, 4(3):355–378, July 2003.
47. Dexter Kozen. Automata on guarded strings and applications. *Matématica Contemporânea*, 24:117–139, 2003.
48. Dexter Kozen. Computational inductive definability. *Annals of Pure and Applied Logic*, 126(1–3):139–148, April 2004. Special issue: *Provinces of logic determined. Essays in the memory of Alfred Tarski*. Zofia Adamowicz, Sergei Artemov, Damian Niwinski, Ewa Orłowska, Anna Romanowska, and Jan Wolenski (eds.). doi:10.1016/j.apal.2003.10.013.
49. Dexter Kozen. Some results in dynamic model theory. *Science of Computer Programming*, 51(1–2):3–22, May 2004. Special issue: *Mathematics of Program Construction (MPC 2002)*. Eerke Boiten and Bernhard Möller (eds.). doi:10.1016/j.scico.2003.09.004.
50. Lucja Kot and Dexter Kozen. Kleene algebra and bytecode verification. *Electronic Notes in Theoretical Computer Science*, 141(1):221–236, December 2005.
51. Kamal Aboul-Hosn and Dexter Kozen. KAT-ML: An interactive theorem prover for Kleene algebra with tests. *Journal of Applied Non-Classical Logics*, 16(1–2):9–33, 2006.
52. Dexter Kozen and Nicholas Ruoizzi. Applications of metric coinduction. *Logical Methods in Computer Science*, 5(3), September 2009. doi:10.2168/LMCS-5(3:10)2009.
53. Dexter Kozen. Coinductive proof principles for stochastic processes. *Logical Methods in Computer Science*, 3(4:8), 2007. doi:10.2168/LMCS-3(4:8)2007.
54. Kamal Aboul-Hosn and Dexter Kozen. Local variable scoping and Kleene algebra with tests. *J. Log. Algebr. Program.*, 2007. doi:10.1016/j.jlap.2007.10.007.
55. Fred B. Schneider, Dexter Kozen, Greg Morrisett, and Andrew C. Myers. Language-based security for malicious mobile code. In *Department of Defense Sponsored Information Security Research: New Methods for Protecting Against Cyber Threats*, pages 477–494. Wiley, 2007.
56. Dexter Kozen. Church-Rosser made easy. *Fundamenta Informaticae*, 103:129–136, 2010.

57. Dexter Kozen. Halting and equivalence of program schemes in models of arbitrary theories. In Andreas Blass, Nachum Dershowitz, and Wolfgang Reisig, editors, *Fields of Logic and Computation: Essays Dedicated to Yuri Gurevich on the Occasion of His 70th Birthday*, volume 6300 of *Lecture Notes in Computer Science*, pages 463–469. Springer–Verlag, August 2010.
58. Dexter Kozen and Ganesh Ramanarayanan. Publication/citation: A proof-theoretic approach to mathematical knowledge management. In Johan van Benthem, Amitabha Gupta, and Eric Pacuit, editors, *Games, Norms, and Reasons: Logic at the Crossroads*, volume 353 of *Synthese Library*, pages 151–161. Dordrecht, Springer Science and Business Media, 2011.
59. Jean-Baptiste Jeannin and Dexter Kozen. Computing with capsules. *J. Automata, Languages and Combinatorics*, 17(2–4):185–204, 2012.
60. Dexter Kozen and Alexandra Silva. On Moessner’s theorem. *The American Mathematical Monthly*, 120(2):131–139, February 2013.
61. Henk Barendregt, Venanzio Capretta, and Dexter Kozen. Reflection in the Chomsky hierarchy. *J. Automata, Languages and Combinatorics*, 18(1):53–60, 2013.
62. Dexter Kozen. Optimal coin flipping. In F. van Breugel et al., editor, *Panangaden Festschrift*, volume 8464 of *Lecture Notes in Computer Science*, pages 407–426. Springer, May 2014.
63. Jean-Baptiste Jeannin, Dexter Kozen, and Alexandra Silva. Well-founded coalgebras, revisited. *Mathematical Structures in Computer Science*, FirstView:1–21, February 2016. doi:10.1017/S0960129515000481.
64. Dexter Kozen and Alexandra Silva. Practical coinduction. *Mathematical Structures in Computer Science*, 27:1132–1152, 2017. doi:10.1017/S0960129515000493.
65. Niels Bjørn Bugge Grathwohl, Fritz Henglein, and Dexter Kozen. Infinitary axiomatization of the equational theory of context-free languages. *Fundamenta Informaticae*, 150:241–257, 2017. doi:10.3233/FI-2017-1469.
66. Jean-Baptiste Jeannin, Dexter Kozen, and Alexandra Silva. CoCaml: Functional programming with regular coinductive types. *Fundamenta Informaticae*, 150:347–377, 2017. doi:10.3233/FI-2017-1473.
67. Dexter Kozen. On the coalgebraic theory of Kleene algebra with tests. In Can Başkent, Lawrence S. Moss, and Ramaswamy Ramanujam, editors, *Rohit Parikh on Logic, Language and Society*, volume 11 of *Outstanding Contributions to Logic*, pages 279–298. Springer, March 2017.

68. Dexter Kozen, Konstantinos Mamouras, and Alexandra Silva. Completeness and incompleteness in nominal Kleene algebra. *J. Logical and Algebraic Methods in Programming*, 91:17–32, 2017. doi:10.1016/j.jlamp.2017.06.002.
69. Dexter Kozen. Natural transformations as rewrite rules and monad composition. *Logical Methods in Computer Science*, 15(1):1–12, January 2019. doi:10.23638/LMCS-15(1)2019.
70. Zoltán Ésik and Dexter Kozen. On free  $\omega$ -continuous and regular ordered algebras. *Logical Methods in Computer Science*, 15(4):1–16, October 2019. URL: <https://lmcs.episciences.org/5876>.
71. Dexter Kozen and Alexandra Silva. Left-handed completeness. *Theoretical Computer Science*, 807:220–233, 6 February 2020. URL: <http://www.sciencedirect.com/science/article/pii/S0304397519306838>, doi:10.1016/j.tcs.2019.10.040.
72. Mark Bickford, Dexter Kozen, and Alexandra Silva. Formalizing Moessner’s theorem and generalizations in NUPRL. *Journal of Logical and Algebraic Methods in Programming*, (JLAMP 100713):1–12, 2021. doi:10.1016/j.jlamp.2021.100713.
73. Dexter Kozen and Matvey Soloviev. Coalgebraic tools for randomness-conserving protocols. *J. Logical and Algebraic Methods in Programming*, 125:100734, February 2022. doi:10.1016/j.jlamp.2021.100734.
74. Anshuman Mohan, Yunhe Liu, Nate Foster, Tobias Kappé, and Dexter Kozen. Formal abstractions for packet scheduling. *Proc. ACM Program. Lang.*, 7(OOPSLA2):1338–1362, October 2023. Article 269. doi:10.1145/3622845.

## Conference Papers

75. Dexter Kozen. On parallelism in Turing machines. In *Proc. 17th Symp. Found. Comput. Sci.*, pages 89–97. IEEE, October 1976.
76. Dexter Kozen. Complexity of finitely presented algebras. In *Proc. 9th Symp. Theory of Comput.*, pages 164–177. ACM, May 1977.
77. Dexter Kozen. Lower bounds for natural proof systems. In *Proc. 18th Symp. Found. Comput. Sci.*, pages 254–266. IEEE, October 1977.
78. Manuel Blum and Dexter Kozen. On the power of the compass. In *Proc. 19th Symp. Found. Comput. Sci.*, pages 132–142. IEEE, October 1978.
79. Dexter Kozen. Indexings of subrecursive classes. In *Proc. 10th Symp. Theory of Comput.*, pages 287–295. ACM, May 1978.
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**Patents**

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