

## SHORTER CURRICULUM VITAE

### AKIHIRO KANAMORI

**DESCRIPTION:** Born 23 October 1948 in Tokyo, Japan;  
now a United States citizen.

#### DEGREES:

1966-1970 California Institute of Technology, Bachelor of Science.  
1970-1975 University of Cambridge (King's College), Doctor of Philosophy.  
Subject: Set Theory, Mathematics.  
Thesis: *Ultrafilters over Uncountable Cardinals*.  
Advisor: A.R.D. Mathias.  
This involved one year of research at:  
1972-1973 University of Wisconsin, Madison.  
Advisor: K. Kunen.

#### PROFESSIONAL EXPERIENCE:

1975-1977 Lectureship at the University of California, Berkeley.  
1977-1981 Benjamin Pierce Assistant Professorship at Harvard University.  
1981-1982 Assistant Professorship at Baruch College of the City  
University of New York.  
1982-1983 Visiting Associate Professorship at Boston University.  
1983-1992 Associate Professorship at Boston University.  
1988-1989 Berman Visiting Professorship, Institute of Mathematics,  
Hebrew University of Jerusalem.  
1992- Professorship at Boston University.  
1995 Visiting Professorship, Institute of Mathematics,  
Hebrew University of Jerusalem.  
2002-2003 Senior Fellow of the Dibner Institute for the History of Science  
and Technology. Visiting Scholar at the Department of the  
History of Science at Harvard University.

2009-2010 Senior Fellow of the Lichtenberg-Kolleg,  
Institute for Advanced Study, Göttingen, Germany.  
  
Lecture Course on Set Theory, Mathematisches Institut,  
Göttingen, Germany, June-July 2010,

### **FELLOWSHIPS AND AWARDS:**

Marshall Scholarship (British Government), 1970-1972.  
Danforth Foundation Fellowship, 1970-1975.  
Woodrow Wilson Foundation Fellowship, 1970.  
  
1984 New England Open Co-Champion of Chess.  
Equal First 1986 Greater Boston Chess Open.  
Equal Second, 1987 Massachusetts Chess Open Championship.  
Equal Sixth, 1989 Israel Open.  
Class Prize, 1992 New England Open Championship.  
  
2002-2003 Senior Fellowship, Dibner Institute  
for the History of Science and Technology.  
  
2005 Metcalf Award for Excellence in Teaching, Boston University.  
2009-2010 Senior Fellowship, Lichtenberg-Kolleg,  
Institute for Advanced Study, Göttingen Germany.

### **ORGANIZATIONS AND ACTIVITIES:**

Association for Symbolic Logic.  
Member of the Executive Council (1981-1990).  
Editor for set theory reviews for *The Journal of Symbolic Logic*, 1981-1990.  
Representative to the American Association for the Advancement of Science,  
1995-8.  
Program Committee for:  
1998 Winter Meeting, Baltimore, Maryland  
2000 Annual Meeting, Urbana, Illinois  
2000 Summer European Meeting, Paris, France  
2005 Winter Meeting, Atlanta, Georgia (Program Chair);  
2013 Annual Meeting, Ontario, Canada  
Member of the Executive Council, 1999-2002.  
Editor for articles for *The Bulletin of Symbolic Logic*, 2001-2006.  
  
American Mathematical Society.  
Reviewer for Mathematical Reviews (Over 250 articles thus far reviewed).  
  
United States Chess Federation.

### **INVITED ADDRESSES AT CONFERENCES since 1995:**

Colloquium on La théorie des ensembles dans les mathématiques du XXème siècle

Institut Henri Poincaré; Paris, France; December 1995.

Boise Extravaganza in Set Theory; Boise State University; March 1997.

Annual Meeting of the American Mathematical Society, Special Session on  
on History of Mathematical Logic, Baltimore, Maryland; January 1998.

Erdős Memorial Conference, Budapest, Hungary; July 1999.

Symposium on Analytic Philosophy, A Tribute to Burton Dreben, Boston University;  
Boston Massachusetts; October 2000.

International Congress for Logic, Methodology and Philosophy of Science at  
Oviedo Spain; August 2003.

International Conference on Mathematical Knowledge, Cambridge University,  
Cambridge England, June-July 2004.

Memorial Conference for Stanley Tennenbaum, Graduate Center  
of the City University of New York, New York City, April 2006

Annual Meeting of the Association for Symbolic Logic; Plenary Speaker,  
Montreal, Canada, May 2006.

Annual Meeting of the American Mathematical Society, Symposium on  
Hilbert's Second Problem; Moderator; New Orleans, January 2007.

Annual Meeting of the Association for Symbolic Logic; Plenary Speaker,  
University of California at Irvine, March 2008.

Summer Meeting of the Association for Symbolic Logic; Plenary Speaker,  
Bern, Switzerland, July 2008.

VIII International Ontology Congress; Plenary Speaker, San Sebastian, Spain,  
September - October 2008.

Mathematics Between the Natural Sciences and the Humanities; Plenary Speaker,  
Göttingen, Germany, October 2008.

Bernaysfest. Carnegie Mellon University, Pittsburgh, Pennsylvania, November 2008.

A Meeting at the Intersection of Logic and Mathematics,  
MAMLS at Harvard, Cambridge, Massachusetts, May 2009.

Ideals of Proof Fellows' Seminar, Paris, France, May 2009.

Diverse Views of Mathematics Workshop, Göttingen, Germany, November 2009.

Workshop on Aspects of Infinity, Keio University, Tokyo, 11 June 2010.

Annual Meeting of the Japanese Association for the Philosophy of Science,  
Shenshu University, Tokyo, 12 June 2010.

Workshop on Set Theory and the Philosophy of Mathematics,  
University of Pennsylvania, Philadelphia, October 2010.

## PUBLICATIONS:

- [1] The Siege of Chitral as an Imperial Factor, *Journal of Indian History* 46(3)(1968), 387-404.
- [2] Weakly Normal Filters and Irregular Ultrafilters, *Transactions of the American Mathematical Society* 220(1976), 393-399.
- [3] Ultrafilters over a Measurable Cardinal, *Annals of Mathematical Logic* 11(1976), 315-356.
- [4] Some Combinatorics Involving Ultrafilters, *Fundamenta Mathematicae* 100(1978), 145-155.
- [5] Strong Axioms of Infinity and Elementary Embeddings, *with William N. Reinhardt and Robert M. Solovay, Annals of Mathematical Logic* 13(1978), 73-116.
- [6] On Vopenka's and Related Principles, in: A. MacIntyre, L. Pacholski, and J. Paris (eds.) *Logic Colloquium '77* (Amsterdam: North-Holland Publishing Company, 1978), 145-153.
- [7] On  $p$ -points over a Measurable Cardinal, *The Journal of Symbolic Logic* 46(1981), 59-65.
- [8] Perfect-Set Forcing for Uncountable Cardinals, *Annals of Mathematical Logic* 19(1980), 97-114.
- [9] Morass-level Combinatorial Principles, in: G. Metakides (ed.) *Patras Logic Symposium* (Amsterdam: North-Holland Publishing Company, 1982), 339-358.
- [10] On Silver's and Related Principles, in: D. van Dalen, D. Lascar, and T. Smiley (eds.) *Logic Colloquium '80* (Amsterdam: North-Holland Publishing Company, 1982), 153-172.
- [11] Morasses in Combinatorial Set Theory, in: A.R.D. Mathias (ed.) *Surveys in Set Theory* (Cambridge: Cambridge University Press, 1983), 167-196.
- [12] Filters for Square-Bracket Partition Relations, *with James M. Henle and Eugene M. Kleinberg, Zeitschrift für Mathematische Logik und Grundlagen der Mathematik* 30(1984), 183-192.
- [13] Separating Ultrafilters on Uncountable Cardinals, *with Alan D. Taylor, Israel Journal of Mathematics* 47(1984), 131-138.
- [14] Negative Partition Relations for Ultrafilters on Uncountable Cardinals, *with Alan D. Taylor, Proceedings of the American Mathematical Society* 92(1984), 83-93.
- [15] Partition Relations for Successor Cardinals, *Advances in Mathematics* 59(1986), 152-169.
- [16] Finest Partitions for Ultrafilters *The Journal of Symbolic Logic* 51(1986), 327-332.
- [17] A Proposal for Deciding Chess Matches, *with Leonid Levin, Players' Chess News, Games and Events* #56, 26 August 1985.

- [18] On Gödel Incompleteness and Finite Combinatorics, *with Kenneth McAloon*, *Annals of Pure and Applied Logic* 33(1987), 23-41.
- [19] Diamonds, Large Cardinals, and Ultrafilters, in: W.A. Carnielli and L.P. de Alcantara (eds.) *Methods and Applications of Mathematical Logic*, Contemporary Mathematics vol. 69 (Providence: American Mathematical Society, 1988), 35-42.
- [20] Regressive Partition Relations for Infinite Cardinals, *with Andras Hajnal and Saharon Shelah*, *Transactions of the American Mathematical Society* 299(1987), 145-154.
- [21] Regressive Partitions and Borel Diagonalization, *The Journal of Symbolic Logic* 54(1989), 540-552.
- [22] The Complete  $0^\dagger$ , *with Tamara Averbuch-Friedlander*, *Zeitschrift für Mathematische Logik und Grundlagen der Mathematik* 36(1990), 133-141.
- [23] Regressive Partitions, Borel Diagonalization, and  $n$ -subtle cardinals, *Annals of Pure and Applied Logic* 52(1991), 65-77.
- [24] Complete quotient Boolean algebras, *with Saharon Shelah*, *Transactions of the American Mathematical Society*, 347(1995), 1963-1979.
- [25] The Emergence of Descriptive Set Theory, in: Jaakko Hintikka (editor), *From Dedekind to Gödel: Essays on the Development of the Foundations of Mathematics*, Synthese Library volume 251 (Dordrecht: Kluwer 1995), 241-262.
- [26] The Mathematical Development of Set Theory from Cantor to Cohen, *The Bulletin of Symbolic Logic* 2(1996), 1-71.
- [27] Hilbert and Set Theory, *with Burton Dreben*, *Synthese* 110(1997), 77-125.
- [28] The Mathematical Import of Zermelo's Well-Ordering Theorem, *The Bulletin of Symbolic Logic* 3(1997), 281-311.
- [29] Volume Introduction to Volume 6, Analytic Philosophy and Logic, *The Proceedings of the Twentieth World Congress of Philosophy* held at Boston University 1998 (Philosophy Documentation Center: Bowling Green State University 2000), xiii-xli.
- [30] Does GCH imply AC locally? *with David Pincus*, in: Gábor Halász, László Lovász, Miklós Simonivits and Vera T. Sós (editors), *Paul Erdős and His Mathematics*, Bolyai Society Mathematical Studies, (Berlin: Springer 2002), volume II, 413-426.
- [31] The Empty Set, the Singleton, and the Ordered Pair, *The Bulletin for Symbolic Logic* 9(2003), 273-298.
- [32] Introductory note to the Gödel-Ulam correspondence, in: Solomon Feferman and John W. Dawson, Jr. (editors-in-chief), *Kurt Gödel Collected Works*, Volume V, Correspondence H-Z Clarendon Press, Oxford 2003, 281-288.
- [33] Zermelo and Set Theory, *The Bulletin for Symbolic Logic* 10(2004), 487-553.
- [34] Levy and Set Theory, *Annals of Pure and Applied Logic* 140(2006), 233-252.

- [35] How Gödel Transformed Set Theory, *with Juliet Floyd, Notices of the American Mathematical Society* 53(2006), 417–425.
- [36] Gödel and Set Theory, *The Bulletin of Symbolic Logic* 13(2007), 153–188. Reprinted in Solomon Feferman, Charles Parsons, and Stephen G. Simpson (editors), *Kurt Gödel: Essays for his Centennial*, Lecture Notes in Logic vol. 33, Association of Symbolic Logic, to appear.
- [37] Cohen and Set Theory, *The Bulletin of Symbolic Logic* 14(2008), 351–378.
- [38] L’ipotesi del continuo, in: Claudio Bartocci and Piergiorgio Odifreddi (editors), *Mathematics and Culture*, volume two, 461–514, Einaudi 2008.
- [39] Set Theory from Cantor to Cohen, 65pp., to appear in: Andrew Irvine and John H. Woods (editors), *The Handbook of the Philosophy of Science*, volume 4, Mathematics, Cambridge University Press 2008.
- [40] Bernays and Set Theory, *The Bulletin of Symbolic Logic*, March 2009.
- [41] The Infinite as Method in Set Theory and Mathematics, *Ontology Studies* 9(2009), 31-41.
- [42] Introduction, 92pp, to: Matthew Foreman and Akihiro Kanamori (editors), *Handbook of Set Theory*, 2197 pages in three volumes, Springer, Berlin 2010.
- [43] Historical Remarks on Suslin’s Problem, in Juliette Kennedy and Roman Kossak (editors), *Set Theory, Arithmetic and Foundations of Mathematics: Theorems, Philosophies*, Lecture Notes in Logic vol. 36, Association of Symbolic Logic, 2010.
- [44] Kunen and Set Theory, *Topology and its Applications*
- [45] Set Theory from Cantor to Cohen, essentially the same as item [39] above, to appear as a book chapter in: Dov Gabbay, Akihiro Kanamori, and John Woods (editors), *Sets and Extensions in the Twentieth Century*, volume 6 of the *Handbook for the History of Logic*, Cambridge University Press 2012.
- [46] Large Cardinals with Forcing, to appear as a book chapter in: Dov Gabbay, Akihiro Kanamori, and John Woods (editors), *Sets and Extensions in the Twentieth Century*, volume 6 of the *Handbook for the History of Logic*, Cambridge University Press 2012.
- [47] The Mathematical Infinite as a Matter of Method, the Annals of the Japan Association for Philosophy of Science, March 2012
- [48] In Praise of Replacement, *The Bulletin of Symbolic Logic*, March 2012.

**MONOGRAPH:**

*The Evolution of Large Cardinal Axioms in Set Theory, with Menachem Magidor*, in: G.H. Müller and D.S. Scott (eds.) Higher Set Theory (Proceedings, Oberwolfach, Germany 1977), Lecture Notes in Mathematics #669 (Springer-Verlag, 1978), pp.99-275.

## BOOK:

*The Higher Infinite*, Perspectives in Mathematical Logic  
(Springer-Verlag), 536 pages, November 1994.  
Corrected second printing, May 1997.  
Japanese translation appeared in late 1998.  
Second edition, April 2003.  
Second edition, Corrected second printing, March 2005.  
Softcover edition, November 2008.  
New reprinting, Beijing World Publishing Corporation, 2012.

## EDITED JOURNAL ISSUES:

*Fundamenta Mathematicae* 154(1997), number 2, guest editor.  
This issue was devoted to the set theory papers presented at the  
Summer Association of Symbolic Logic Meeting, Haifa Israel 1995.

*Synthese* 110(1997), number 1, guest editor with Alfred Tauber.  
This issue was devoted to the papers presented at a symposium on  
Hilbert's Philosophy of Mathematics, November 1993,  
part of the Boston Colloquium for Philosophy of Science.

*Synthese* 111(1997), number 2, guest editor.  
This issue was devoted to the papers presented at a symposium on  
Proof and Progress in Mathematics, February 1996,  
part of the Boston Colloquium for Philosophy of Science.

## EDITED BOOKS:

Volume 6, *Analytic Philosophy and Logic, The Proceedings of the Twentieth  
World Congress of Philosophy* held at Boston University 1998.  
(Philosophy Documentation Center: Bowling Green State University 2000).

*International Directory of Logicians*, set theory editor, with  
managing editors Dov M. Gabbay and John H. Woods,  
College Publications, 2009.

*Handbook of Set Theory*, with Matthew Foreman, 2197 pages in three volumes.  
Springer, Berlin, 2010.

*Collected Works of Ernst Zermelo, Volume I*, with Heinz-Dieter Ebbinghaus,  
supported by the Heidelberger Akademie, Berlin 2010.

*Sets and Extensions in the Twentieth Century*, with Dov Gabbay and John Woods,  
volume 6 of the *Handbook for the History of Logic*, to appear in 2012.  
Cambridge University Press.