

Vita of Yiannis N. Moschovakis

Born: Athens, Greece, January 18, 1938.

Education: B.S., M.S., Mass. Inst. of Technology, 1960, Ph.D., U. of Wisconsin, 1963, under the direction of Stephen C. Kleene.

Academic positions: Benjamin Peirce Instructor, Harvard, 1963 - 1964. In the UCLA Mathematics Department since 1964, Professor of Mathematics 1971 - 2010; Professor of Mathematics, University of Athens, 1996 - 2005; Professor of Mathematics Emeritus, University of Athens, 2005 - ; Professor of Mathematics Emeritus, UCLA, 2010 - ; Distinguished Research Professor, UCLA (2012 - 2015, 2015 - 2018).

Research interests: Recursion theory, Descriptive set theory, Foundations of Computer Science; Philosophy of language (and mathematics).

Teaching: Twenty five Ph.D. students: twenty two from Mathematics at UCLA (including four who were essentially students of Abraham Robinson after he left UCLA and one who worked primarily with Alexander Kechris of Caltech); two from Computer Science at UCLA; one from the Graduate Program for Logic Algorithms and Computation at the University of Athens; and one from the Department of Mathematics at the University of Athens. I have been nominated by my Department for the UCLA Distinguished Teaching award, and I won the Departmental Robert Sorgenfrey Teaching Award in 1996.

Fellowships, honors, etc.: Guggenheim Fellowship, 1968-1969; Sloan Fellowship, 1970-1972; Fullbright Travelling Lectureship (Novosibirsk), March 1979; Corresponding Member of the Academy of Athens, elected 1980; Honorary Ph.D. in Mathematics from the University of Athens, conferred 1987. Honorary Ph.D. in Mathematics from the University of Sofia (Bulgaria), conferred 2002. Commander of the order of Phoenix medal of Greece, conferred 2014. American Mathematical Society Fellow, 2016 -

Publications: Some sixty research papers in logic, set theory, recursion theory, the foundations of computer science and the philosophy of language; two research monographs, *Elementary Induction in Abstract Structures* and *Descriptive Set Theory*; and one textbook, *Notes on Set Theory*. (This has also been published in Greek.)

Administration, professional service, etc.: MATHEMATICS DEPARTMENT, UCLA: Undergraduate Vice Chair, 1969-1970; Graduate Vice Chair, 1979-1980, 1982-1984; Chair, 1984-1987; Director of the Program in Computing, 1987-1989. ASSOCIATION FOR SYMBOLIC LOGIC: Editor of the Journal of Symbolic Logic, 1977-1982; Vice President, 1983-1986, 1989-1992; Editor of the Perspectives in Mathematical Logic Series, 1989-1998; President, 1992-1995; AMERICAN MATHEMATICAL SOCIETY: Member of the Steele Prize Committee, 1982-1985 (Chair for 1983-1985); Member of the Council, 1986-1989. NATIONAL SCIENCE FOUNDATION: Member of the Advisory Panel for Mathematics, 1980-1982; Member of the Selection Committee for Postdocs, 1981-1983. LOGIC FOR COMPUTER SCIENCE: Member of the Organizing Committee, 1990-1998; Member of the Program Committee, 1992. GREECE: Director, Graduate Program in Logic, Algorithms and Computation (MPLA), 1997-2005.

Some invited lectures: International Congress of Mathematicians, 1974; International Congress for Logic, Methodology and Philosophy of Science, 1971, 1975,

1995, 2011; European Summer meetings of the ASL, 1969, 1975, 1980, 1981, 1983, 1990; ASL Annual Meeting, 1985; AMS Summer Meeting, 1984; AMS Research Institutes in Set Theory (1967) and Recursion Theory (1982); The Vienna Circle Lecture, European Summer School in Logic, Language and Information, Helsinki, August 2001; The Tarski Lectures at UC Berkeley, Spring 2008; The Heyting lecture, Amsterdam, September 2012; Two of the Lindström Lectures (the other two given by Joan R. Moschovakis), Gothenberg, Sweden, October 2014.

Some recent and pending invited lectures: 11th Panhellenic Logic Symposium, Delphi, Greece, July 12-16, 2017; L.E.J. Brouwer, Fifty years later, Amsterdam, December 9, 2016; Workshop on “Mathematics for Computation” (M4C), Abtei Niederaltaich (Lower Bavaria, Germany), May 8 - 13, 2016; Winter School in Abstract Analysis, section Set Theory and Topology, Hejnice, Czech Republic, January 30 - February 6, 2016, three lectures in effective descriptive set theory; Summer School at Chiemsee, Germany, July 2014, two lectures on the foundations of the theory of algorithms; Workshop at CSLI, Stanford, May 31 - June 2, 2014; Workshop at UC Irvine, February 2014; Mostowski Centenary, Warsaw, October 2013; Workshop on Limits of Mathematical Knowledge, Bristol, March 2013; The constructive in logic and applications (Artemov’s 60th), New York, May 2012; Short course on Recursion and Complexity at the Logic and Interaction meeting, CIRM, Luminy, January 2012; Oberwolfach workshop in proof theory and constructive mathematics, November 2011; International Congress for Logic, Methodology and Philosophy of Science, Special session on the notion of algorithm, 2011; University of North Texas (Colloquium and RTG lecture), 2010; Warsaw University, minicourse in lower bounds in arithmetic, 2010; State University of Iowa, joint lecture to the Mathematics and Computer Science Departments, 2010; European Summer School in Logic, Language and Information (ESSLLI), Evening Lecture in July 2009 (Bordeaux) and advanced course on “Meanings as algorithms” (with Fritz Hamm) in July 2010 (Copenhagen); Computer Science Logic (CSL) annual conference, Coimbra, Portugal, September 2009; Logic in Computer Science (LICS), CMU, June 2008; Oberwolfach meeting in Proof Theory and Computation, April 2008.

Bibliography of Yiannis N. Moschovakis

BOOKS

1. Y.N. Moschovakis, *Elementary induction on abstract structures*. North Holland, 1974. Reprinted by *Dover Publications*, 2008.
2. Y.N. Moschovakis, *Descriptive set theory*. Studies in Logic, North Holland, 1979. Second Edition, volume 155 in the *Mathematical surveys and monographs* series of the American Mathematical Society, 2009.
3. Y.N. Moschovakis (ed.), *Logic from Computer Science*. Proceedings of a workshop held November 13-17, 1989 at MSRI, Berkeley, California; Springer Verlag, 1990.
4. Y.N. Moschovakis, *Notes on Set Theory*. Undergraduate Texts in Mathematics, Springer, 1994. Second Edition, Springer, 2006.
5. Γ. Μοσχοβάκης, *Σημειώσεις στη Συνολοθεωρία*, Greek translation of [4], Νεφέλη, Αθήνα 1994.

ARTICLES

1. Y.N. Moschovakis, *Recursive metric spaces*. Fund. Math., **55**, 1964, 215-238,
2. Y.N. Moschovakis, *Notation systems and recursive ordered fields*. Compositio Math., **17**, 1965, 40-71,
3. Y.N. Moschovakis, *Many-one degrees of the predicates $H_a(x)$* . Pacific J. Math., **18**, 1966, 329-342,
4. Y.N. Moschovakis, *Hyperanalytic predicates*. Trans. Amer. Math. Soc., **129**, 1967, 249-282,
5. J.W. Addison, Y.N. Moschovakis, *Some consequences of the axiom of definable determinateness*. Proc. Nat. Acad. Sci., **59**, 1968, 708-712,
6. Y.N. Moschovakis, *Abstract first order computability:I*. Trans. Amer. Math. Soc., **138**, 1969, 427-464,
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8. Y.N. Moschovakis, *Abstract computability and invariant definability*. J. Symbolic Logic, **34**, 1969, 605-633,
9. Y.N. Moschovakis, *The Suslin-Kleene theorem for countable structures*. Duke Math. J., **37**, 1970, 341-352,
10. Y.N. Moschovakis, *Determinacy and prewellorderings of the continuum*. Math. Logic and Foundations of Set Theory (Y. Bar-Hillel, ed), Amsterdam-London, 1970, 24-62,
11. C.C. Chang, Y.N. Moschovakis, *The Suslin-Kleene theorem for V_k with cofinality(k) = w* . Pacific J. Math., **35**, 1970, 565-569,
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13. Y.N. Moschovakis, *Axioms for computation theories - First draft*. In Logic Colloquium '69, R.O. Gandy and C.E.M. Yates (eds.), North-Holland, 1971, 199-255,
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