

CURRICULUM VITAE ET STUDIORUM

Name: Aldo de Luca

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Date of birth: 30 November 1941

Formation

1. 1964, Degree in Physics *cum laude* at the University of Naples.
2. 1967, Specialization in Theoretical Physics *cum laude* at the University of Naples.
3. 1971, Qualification for University teaching (Libera Docenza) in Cybernetics and Information theory.

Present position

2012– Professor emeritus of Faculty of Science of University of Naples Federico II.

Past positions

2003–2010. Full professor of Theoretical Computer Science at Faculty of Science of University of Naples Federico II.

1999–2002. Professor detached at the Interdisciplinary center ‘B. Segre’ of the National Academy of Lincei.

1985–1999, 2002–2003. Full professor of Theoretical Computer Science at the Faculty of Science of the University of Rome “La Sapienza”.

1984–85. Full professor of Higher Algebra at the Faculty of Science of the University of Naples.

1980–83. Full professor of Algebra at the Faculty of Science of the University of Naples.

1974-80. Established University Lecturer of Automata Theory at the Faculty of Science of the University of Salerno.

1968-73. Established University Lecturer of Cybernetics at the Faculty of Science of the University of Naples.

1967-1981. Researcher of the C.N.R. (National Research Council) at the Institut of Cybernetics, Arco Felice, Napoli.

Research projects

- 1981— member of G.N.S.A.G.A. (National group of algebraic and geometric structures) of CNR.
- Principal investigator of the team of the University of Rome “La Sapienza” of the following European projects:
 - 1990-92, European project ASMICS EBRA working group on “Algebraic and Syntactic Methods in Computer Science” (A.S.M.I.C.S).
 - 1992-95, European project ASMICS 2, EBRA on “Algebraic and Syntactic Methods in Computer Science”
- Coordinator of the University of Rome “La Sapienza” of the following national projects:
 - 2001-2002 COFIN project, “Linguaggi Formali e Automi:Teoria ed Applicazioni”.
 - 1998-2000 COFIN project, “Modelli di calcolo innovativi: Metodi sintattici e combinatori”.
 - 1993-1996, national project 40 %: “Efficienza di Algoritmi e progetto di strutture informative”.
 - 1991-93, national project 40%: “Algoritmi, modelli di calcolo e strutture informative”.
 - 1988-90, national project 40%: “Algoritmi e Strutture di calcolo”.
- Principal investigator of the following projects of the University of Rome “La Sapienza”:
 - 2000-2002, Faculty project: “Metodi algebrici e combinatorici in teoria degli Automi, dei Linguaggi e dei grafi”
 - 1998-2000, University project: “Tecniche combinatorie ed algoritmiche in teoria dei Linguaggi”

- Coordinator of the University of Naples of the following national projects:
1983-85, national project 40%: “Metodi formali per lo studio dei linguaggi, basi di dati ed architetture di sistemi di elaborazione”.
- Coordinator of the national research project:
1981-83, national project 40%: “Informatica Matematica. Teoria dei codici, degli automi e dei linguaggi formali”.

Academic activity

2004–2010 Member of the college of teachers of Ph.D. in Computational Sciences and Informatics of the University of Naples Federico II. Chairman of the college in 2006–2007.

1991–2003 Member of the college of teachers of Ph.D. in Informatics of the University of Rome “La Sapienza”.

1980-90 Member of the college of teachers of Ph.D. in Applied Mathematics and Informatics of the University of Naples Federico II.

1983– Advisor of several Ph.D. thesis in Italy (e.g., C. de Felice, S. Varricchio, A. Carpi, R. Mantaci, etc.) and in foreign countries.

1986– President of the jury of several competitions for university professorships, and researcher positions in the University and in CNR.

Scientific activity

The research interests were and are in the area of Theoretical Computer Science. In particular: neural networks, theory of automata and formal languages; semigroups; combinatorics on words; theory of codes and information; algorithmic complexity and uncertainty measures; extensions of methods of combinatorics on words to non-linear combinatorial structures; algorithms on words and applications to the analysis of DNA sequences.

The results of the research have been published in more than 120 articles in professional international Journals, several communications at international and national meetings, various articles in volumes or chapters in books, and 4 books.

Further activities and acknowledgments

- Member of the Academy of Mathematical and Physical Sciences of Naples.
- Member of the editorial board of the following journals:
 - 1991–International Journal of Algebra and Computation.
 - 1991–2005 Pure Mathematics and Applications.
 - 1976–92 Stocastica.
- 1978 organizer of the International meeting: “Non-Commutative Structures in Algebra and Geometric Combinatorics” and editor of the Proceedings.
- Member of the Program or Steering Committee of the following international conferences: I.E.E.E. International Symposium on Information Theory, Grignano, 1979; International Conference on Information Processing and Management of uncertainty in knowledge-based systems, Paris, 1986; Mathematical Foundation of Computer Science, Carlsband, 1988; International Conference Structure: From Physics to General Systems (in honour of E. R. Caianiello) 1991; 10 Symposium on Theoretical Aspects of Computer Science, 1993; Eurocode '92; CAAP '94; 5 Italian Conference on Theoretical Computer Science (ICTCS) 1995; Conference ‘Words’, Rouen, 1997; Workshop on Formal developments in Formal Languages, Bologna 1997; Conference ‘Words’, Rouen, 1999; Conference ‘Words’, Palermo, 2001; Conference ‘Words’, Turku, 2003; Conference ‘Words’, Montreal, 2005; Workshop on Fibonacci word, Turku, 2006; DLT 2008, Kyoto, 2008; LATA 2009; Tarragona, ‘Words’ 2009, Salerno; CPM 2011, Palermo, DLT 2011 Milano; LATA 2015, Nice.
- Invited from various prestigious institutions (International Science Foundation, FCAR (Canada), NSERC (Canada) and Finland Academy) to evaluate the scientific quality of several research projects.
- 1982–1994 Member of the Scientific Council of the Laboratoire d’Informatique Théorique et Programmation of the University of Paris 7.
- 1992 Member of the jury to award the ‘Italgas prize’ for the Informatics.
- 2001 Idoneus to conferment of the charge of Director of the Institute “Mauro Picone” of CNR (announcement n.126.01 of CNR).
- 2001 Publication of a special issue of the Journal “Theoretical Informatics and Applications” (vol.35, 6, 2001) (A tribute to Aldo de Luca) in occasion of his 60-th birthday.

- 1973–2005 member of the American Mathematical Society, of U.M.I. (Italian Mathematical Union), EATCS, Italian Society of Logic and Philosophy of Science.
- 1962 Award of L. 300.000 of the National Institute for Nuclear Energy.
- 1963 Award of L. 500.000 of the Foundation Angelo Della Riccia.
- 1968 Award of a Fellowship to Neurosciences Research Program (Boulder, Colorado).

Meetings and visits

- Contributor or invited speaker to several international and national professional meetings.
- Invitation to give the following general conferences:
 - 1982 Conference on the ‘General Theory of Codes’ at the National Academy of Lincei (Rome).
 - 1997 Conference on Combinatorics on words at the School of scientific Journalism of SISSA (Trieste).
 - 2002 Faculty Conference on ‘Structure and complexity of words’ given at the Faculty of Science of the University of Rome “La Sapienza”.
 - 2002 Conference at the international meeting organized by the University of Moscow for the centenary of the birth of P.S. Novikov.
 - 2007 Conference at the international meeting ‘Leonhard Euler and modern combinatorics’ (1-7 June 2007, S. Petersburg) on the occasion of the three hundredth anniversary of the birth of Euler.
 - 2014 Conference at the international meeting ‘Arto 80’ (Turku, Finlandia) on the occasion of the eighty years of Arto Salomaa.
- Invited professor from various Universities (Budapest, Szeged, Paris VI and VII, Rouen, Varsavia, San Paulo, Marne la Vallée, Turku, Montreal) to give cycles of lectures and seminars or for scientific collaboration.