CURRICULUM VITAE OF PAOLO d'ALESSANDRO

Paolo d'Alessandro was born in Brescia (Italy) in 1945. He holds a degree in Electronic Engineering (1968) and a postdoctoral degree in Computer and System Engineering (1971), both from University of Rome "La Sapienza".

In 1968 he joined the Department of Computer and System Sciences of University of Rome "La Sapienza". He has held professorships at Universities of Ancona, of L'Aquila and of Rome "La Sapienza". In 1980 he got his full professorship. In 1992 he joined (as cofounder) the Department of Mathematics of the Third University of Rome.

From 1975 to 1976 he has been visiting first the Division of Applied Physics at Harvard University and then the Department of System Science at U.C.L.A. supported by two NATO fellowships.

Paolo d'Alessandro has authored or coauthored more than 60 scientific papers and various books.

Here is a list of topics and for each one or a few examples.

Linear finite dimensional system theory

P. d'Alessandro, A. Isidori and A. Ruberti - "A new approach to the theory of canonical decomposition of linear dynamical systems", **SIAM Journal on Control**, vol. 11, no. 1, July 1971.

Bilinear Systems

P. d'Alessandro - "Structural properties invariance and insensitivity of discrete time bilinear systems", **Ricerche di Automatica**, vol. 3, no. 2, August 1972.

P. d'Alessandro, A. Isidori and A. Ruberti - "Theory of bilinear dynamical systems" - Notes of a course held at the Department of Automation of CISM (Udine-Italy), **Springer Verlag**, 1972.

P. d'Alessandro - "Bilinear invariance and insensitivity" **Ricerche di Automatica**, vol. 5, no. 2/3, December 1974.

Probability theory and stochastic systems

P. d'Alessandro - "Vector topologies and the representation of spaces of random variables", **Applied Mathematics and Optimization**, vol. 4, no. 1, 1977.

P. d'Alessandro - "Some remarks of measure theory and of topology applied to the definition of the Ito integral", **Applied Mathematics and Optimization**, vol. 4, no. 3, 1978.

Mathematical Programming

P. d'Alessandro - "Optimal smoothings" - Proceedings of the Symposium ber Operation Research, St. Gallen (Switzerland), **Athenaum Printers**, August 1982.

Linear PDE

P. d'Alessandro and M. Piccioni - "Differential representation of general class of linear systems", **International Journal of System Science**, vol. 16, no. 3, 1985.

Decision Theory

P. d'Alessandro - "Group decisions as twice multicriteria optimum problem", **Journal of Multicriteria Decision Analysis**, Vol. 2, 37. 1-4, 1993.

Decision Support Systems

P. d'Alessandro, M. Dalla Mora and E. De Santis - "Issues in design and architecture of advanced dynamic model management for decision support systems", **Decision Support Systems**, 5, 1989, pp. 365-377.

Range space and conical theory of polyhedra and LP in finite dimension

P. d'Alessandro, "A conical approach to linear programming - scalar and vector optimization problems", **GORDON and BREACH SCIENCE PUBLISHERS, Amsterdam 1997.**

P. d'Alessandro, "A new internal primal conical evolutive algorithm, **JOTA Vol.132 No.2 November 2006, pp.195-207**.

Linear linearly constrained systems and their control

P. d'Alessandro and E. De Santis - "Positiveness of dynamic systems with non positive coefficient matrices", **IEEE Trans. on A.C.**, Vol 39, No. 1, Jan. 1994.

P. d'Alessandro and E. De Santis, "Controlled Invariance and Feedback Laws", **IEEE Trans. Autom. Control. 46(7): 1141-1146 (2001).**

Visual Perception

P. d'Alessandro, "Retinal Curvature and geometry of image formation", **Brain Research**, August, 2008.

(Also Color theory in the forthcoming book below)

Norm optimal control of linear PDE, Infinite dimensional polyhedra and optimization over infinite dimensional polyhedra, Infinite dimensional hypersurfaces, color theory

P. d'Alessandro, "Closure of Pointed Cones and Maximum Principle in Hilbert Spaces" **CUBO a Math. Journal,** Vol. 13, NO 2 (73-84), June 2011.

P. d'Alessandro, "On range space techniques, convex cones, polyhedra and optimization in infinite dimensions (with an ad hoc Functional Analysis introduction)", **Forthcoming book.**