

CURRICULUM VITAE of Maurizio Serva

General data:

- Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica (DISIM), Università dell'Aquila.
- Telephone: +39 0862433153, E-mail: maurizio.serva@univaq.it.
- Languages: Italian, English, Portuguese, French, Spanish and Malagasy.

Education:

- Laurea (*summa cum laude*) in Physics, University of Rome "La Sapienza", 26th July 1984. Title of the thesis: *L'Impulso in Meccanica Stocastica*. Supervisor: Marcello Cini.
- *Doktor der Naturwissenschaften* (Doctor Rerum Naturalium), University of Bielefeld, Germany, 20th August 1990. Title of the thesis: *Stochastic Processes; a Possible Language for Quantum Mechanics*. Supervisor: Philippe Blanchard. Note: *ausgezeichnet* (excellent).

Career:

- Civil service as auxiliary operator for fire prevention of the Italian Forest Rangers, October 1981 - September 1982.
- Guest researcher at the Research Center on Stochastic Processes Bi.Bo.S., University of Bielefeld (Germany), January 1985 - September 1985.
- Fellowship from Istituto Nazionale per la Fisica Nucleare for research at the University of Rome "La Sapienza", October 1985 - September 1987.
- Associate Researcher of the Centre National de la Recherche Scientifique at the Laboratory of Theoretical Physics, Luminy (Marseille), October 1987 - March 1988.
- Fellowship from Consiglio Nazionale delle Ricerche at the Research Center on Stochastic Processes Bi.Bo.S., University of Bielefeld (Germany), July 1988 - June 1990.
- Senior Researcher in Mathematical Physics at the University of L'Aquila, June 1990 - May 2015.
- Italian qualification as Associate Professor in Mathematical Physics achieved in December 2013 (2012 ASN Session). From May 2015 Associate Professor in Mathematical Physics at the University of L'Aquila.
- Italian qualification as Full Professor in Mathematical Physics in the 2018 ASN session, credited in November 2020.

Visits and fellowships:

- Guest professor at the Institut Supérieur Polytechnique de Madagascar in Antananarivo (sabbatical), November 1994 - October 1995.
- Guest researcher at the Research Center BiBoS in Germany, the Federal University of Minas Gerais in Brazil and the University of Fribourg in Switzerland (sabbatical), November 2008 - October 2009.
- Guest professor at the Universidade Federal do Rio Grande do Norte in Brazil (sabbatical), October 2012 - September 2013.
- Guest professor at the Université de Toliara (Madagascar) and at the Institut Supérieur Polytechnique de Madagascar in Antananarivo (sabbatical), November 2018 - May 2019.
- Moreover short visits at various Universities and Institutions. Among others: the Federal University of Alagoas in Brazil, the Research Center BiBoS in Germany, the Polytechnic of Antananarivo in Madagascar, the University of Stockholm, the Nordita Institute in Copenhagen, the University of Fribourg in Switzerland, the Federal University of Minas Gerais in Brazil, the Centre National de la Recherche Scientifique at the Laboratory of Theoretical Physics, Luminy (Marseille), the University of Toliara in Madagascar and the Federal University of Rio Grande do Norte in Brazil.

Scientific output:

- Present research: Quantitative Linguistics, Relativistic Stochastic Processes and Quantum Localization by Brownian Noise and Non-linearity.
- Previous research: Stochastic Methods in Quantum Mechanics, Foundations of Quantum Mechanics and Classical Limit, Dynamical Systems and Information Theory, Statistical Mechanics of Disordered Systems, Classical and Quantum Statistical Mechanics on Networks and Fractals, Stochastic Models in Finance, Evolution Models in Biology, Epidemics Models in Biology, Reaction-Diffusion Models in Physics and Biology, Non-Markovian Random Walks and Anomalous Diffusion.
- Author of 120 research papers published in international journals. Also author of articles in volume, conference proceedings, encyclopedia entries and popularization papers.
- Organizer of about 20 scientific meetings and author of about 90 invited and conference talks in various countries: Italy, Madagascar, Denmark, France, Germany, Brazil, Croatia, Romania, Sweden, Switzerland, Argentina, Finland, Indonesia, Brazil, Slovenia, Bulgaria, Spain, Portugal, Israel and Greece.

Teaching:

- Various courses from 1990 to today at the University of L'Aquila (included PhD) and SSIS (Scuola di Specializzazione all'Insegnamento Secondario): *Classical Mechanics*, *Statistical Mechanics*, *Financial Mathematics*, *Time Series Analysis*, *Statistics for Biology*, *Mathematical Models of Financial Markets*, *Mathematical Models in Science*, *Teaching of Financial Mathematics*, *Classical and Analytical Mechanics*, *Mathematical Physics*, *Rational Mechanics* *Differential Equations of Mathematical Physics*, *Mathematical Models*, *Why Microscopic Word is Not "Classic"?*, *Statistical Tools for Infrastructures Design*, *Quantum Theory and Information*.
- Two courses for PhD students in 2013 at the Federal University of Rio Grande do Norte (Brazil): *Mathematical Models for Biology* and *Probability and Statistics*.
- Author of two constantly updated online textbooks: *Briciole di Meccanica Classica* and *Briciole di Meccanica Quantistica*.
- Supervisor of Master and PhD theses in Physics and in Mathematics at the Universities of L'Aquila and Rome "La Sapienza".
- From November 1994 to the end of October 1995 and again at different times from 2006 to 2009, trainer of teachers at the Institut Supérieur Polytechnique de Madagascar.
- Member of the board of the teachers of the PhD course of the University of L'Aquila named *Mathematics*, cycles from XXV to XXVIII starting in the years from 2009 to 2012 and of the board of the teachers of the PhD course of the University of L'Aquila named *Mathematics and Models*, cycles from XXIX to XLI starting in the years from 2013 to 2025.
- From 2015 member of the board of the teachers for the creation of the doctoral program of the Institut Supérieur Polytechnique de Madagascar in Antananarivo.
- In 2006 builder and from 2006 director of a primary school in the village of Ambatomilo, in the South-West of Madagascar.