

## FABIO BOSCHETTI - CURRICULUM VITAE

**Summary.** I am an applied mathematician with a strong multidisciplinary experience, ranging from numerical optimisation to complex system science, ecological and socio-economic modelling, data visualisation, information theory, statistical analysis, image processing and modelling of various geophysical processes. Much of my theoretical work has focussed on the challenges and limitations of modelling complex processes via numerical simulation.

**Current Research.** The aim of my current research is to improve our understanding of how we can best model ecosystems and their interaction with human activities. We know that ecological and human systems are 'complex'. From the one hand, we need to address this complexity, accounting for multiple phenomena interacting at different scales, uncertainty, many degrees of freedom and feedback cycles messing up causal relations. From the other hand, we need to simplify our analysis to make it manageable. Finding some sort of workable compromise is what most of my research is about.

**Publications.** I have published over 90 refereed papers including over 50 fully-refereed journal papers and book chapters, in disciplines as diverse as numerical optimisation, philosophy of science, complex system science, environmental science and theoretical biology. A full list of papers together with the electronic copies of most of my publications is available at <http://www.per.marine.csiro.au/staff/Fabio.Boschetti/>

**Born:** 21 July 1964

**Nationality:** Italian, Australian

**Languages:** Italian, English, Spanish (basic)

**E-Mail :** Fabio.Boschetti@csiro.au

**Internet:**

<http://www.per.marine.csiro.au/staff/Fabio.Boschetti/>

### Professional Experience

**2004 – present:** Research Scientist; CSIRO, Marine and Atmospheric Science, Australia

**1996 – 2004:** Research Scientist; CSIRO, Exploration and Mining, Australia

**1990 – 1993:** Project Manager, Research and Development; ITA 12, Italy (Consultancy group in environmental studies).

**1989 – 1990:** Consultant, Research and Development; CAP Gemini Sysgen, Italy (Software engineering).

### Education

**PhD in Mathematical Geophysics,** University of Western Australia. 1995 .

Thesis: 'Application of Genetic Algorithms to the Inversion of Geophysical Data'

**Honors in Earth Science,** University of Genoa, Italy, 1988 Grade: 110/110 with 'laude'.

