Pier Luigi Ferrari

PERSONAL DATA

Born in La Spezia on June, 20, 1952
Living in Genova

BIO AND EDUCATION

Has got his high school certificate at the Liceo Ginnasio 'Lorenzo Costa' in La Spezia.

Has graduated magna cum laude on July, 15, 1975 with a dissertation on "Introduction to an axiomatic theory of natural transformations", supervisor Prof. Pietro Amedeo Arduini.

From 1975 to 1990 has attended a number of summer schools in the field of mathematical logic.

UNIVERSITY CAREER

2007-	Full professor, Università del Piemonte Orientale
1998-2006	Adjunct professor, Università del Piemonte Orientale
1993-1998	Adjunct professor, Università di Torino
1992-1993	Adjunct professor, Università di Catania
1980-1992	Researcher, Università di Genova
1975-1980	Scholarship, Università di Genova

UNIVERSITY POSITIONS

2015-	Vice-dean, Dipartimento di Scienze e Innovazione Tecnologica, Università del Piemonte Orientale
2011-	Member of the board of the CIFIS (Centro Interateneo di interesse regionale per la formazione degli Insegnanti Secondari)
2009-2011	Vice-dean, Facoltà di Scienze M.F.N., Università del Piemonte Orientale
2007-2013	Chair, Consiglio di Corso di Studi in Matematica e Applicazioni

SCIENTIFIC POSITIONS

2016-	Managing editor of the journal "L'insegnamento della matematica e delle scienze integrate", sezione B
2014-2016	Vice-president of the Associazione Italiana Ricercatori in Didattica della Matematica (AIRDM)
2012-	Member of the board of the Centro Ricerche in Didattica della Matematica "Ugo Morin"

1. Language in mathematics learning
2. Problem solving in mathematics
3. Proof and argumentation in mathematics and education
4. Selection operators in 1st order theories
5. Extensionality and recursion

CURRENT ISSUES OF RESEARCH

1. A functional linguistics perspective in the analysis of the language of mathematics

M.A.K. Halliday's functional linguistics framework is applied to the analysis of the language of mathematics in order to interpret language-related students' difficulties.

2. Reasoning in mathematics setting and understanding proofs: the role of language

On the basis of a critical reading of some current models for reasoning in mathematics, the role of linguistic competence is studied related to the development of written explanations and argumentations by undergraduates.

3. E-learning and mathematics education: the potential of self-training online activities

The opportunities provided by the e-learning platforms to the learning of mathematics are investigated, with special regard for resources and activities designed for online self-training.

CURRENT FUNDED PROJECTS

PROGRAMME	FUNDED PROJECT
Ricerca locale Bando 2015	Applicazione della matematica a contesti sociali

TOP FIVE PAPERS

1. Ferrari, P.L.: 1987, 'A note on a proof of Hilbert's II ε-theorem', *The Journal of Symbolic Logic* 52 -1, 214-215.
2. Ferrari, P.L.: 2003, 'Abstraction in Mathematics', in Saitta, L. (Ed.), *The abstraction paths: from experience to concept,* Phil.Trans.R.Soc.Lond. B, Vol.358, No.1435, 1225-1230
3. Ferrari, P.L.: 2001, 'Understanding Elementary Number Theory at the Undergraduate Level: A Semiotic Approach', in Campbell, S.R. & R.Zazkis (Eds.) *Learning and Teaching Number Theory: Research in Cognition and Instruction,* Westport (CT, USA): Ablex Publishing, pp.97-115.
4. Boero, P., N.Douek & P.L.Ferrari: 2008, 'Developing mastery of natural language: Approaches to some theoretical aspects of mathematics', in English, L. (Ed.), *Handbook of International Research in Mathematics Education*, second edition, Mahwah (NJ, USA): Lawrence Erlbaum Associates, 262-295.

5. Bottino, R.M., G.Chiappini & P.L.Ferrari: 1994, 'A Hypermedia System for Interactive Problem Solving in Arithmetic', *Journal of Educational Multimedia and Hypermedia,* vol.3 n.3/4, p.307-326.

AWARDS

Best EdMedia paper 1993